

**Zebra
TLP 3844-Z™**

**Product
Guide**



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About Zebra Technologies

Zebra Technologies (Nasdaq: ZBRA) delivers innovative and reliable on-demand printing solutions to businesses and governments in 90 countries around the world; more than 90% of Fortune 500 companies use Zebra-brand printers. A broad range of applications benefit from Zebra®-brand thermal bar code label and receipt printers and Eltron®-brand card printers, resulting in enhanced security, increased productivity, improved quality, lower costs, and better customer service. The company, with an installed base of more than two million printers, also offers software, connectivity solutions, and printing supplies. Information about Zebra bar code products can be found at www.zebra.com. The company's Web site for thermal printing supplies is www.zipzebra.com.

Key market sectors include:

Manufacturing, warehousing, shipping and parcel delivery, distribution, logistics, automotive, healthcare and retail.



Introduction

The TLP 3844-Z™ is Zebra's 300 dpi advanced desktop printer with ZPL™ capability. Engineered using the design of the new 2844-Z™ platform, the 3844-Z brings high-resolution print capability to the ZPL desktop architecture. Enhanced electronics allow full ZPL compatibility, including ZebraLink™, and triple communications interfaces are standard (serial, parallel, USB).

Product Positioning

The TLP 3844-Z is equipped with a **300 dpi printhead** for printing high quality, crisp, clear data on a variety of labels and tags. Applications requiring printing of two-dimensional barcodes, fine text or composite graphics are well served by this printer. High-density 300 dpi resolution printing also ensures that very small labels, such as those used on laboratory vials or items of jewelry have more accurate read and scan results.

Versatile communications protocols are a priority in the modern business world - the 3844-Z offers the most **superior integration & networking choices** of any 300 dpi desktop thermal label printer in the industry. Serial, parallel and USB interfaces are standard and the optional internal ZebraNet® PrintServer II interface provides quick and easy integration into Ethernet networks. When equipped with a ZebraNet PrintServer II, the printer unlocks the power of ZebraLink™, which brings the benefits of advanced network management such as remote printer control and detailed printer status alerts.

The 3844-Z delivers **enhanced performance** – based on the new 2844-Z electronics architecture, a new 32-bit microprocessor drives the 3844-Z to provide impressive throughput, entirely superior to other 300 dpi desktop printer offerings.

With its **Proven Desktop Design** consisting of sturdy dual walled construction and Zebra's practical OpenACCESS™ design, the 3844-Z is hard wearing, practical and easy to load and use.

US List Price: TLP 3844-Z \$895



Unique Selling Points

- 300 dpi Print Resolution**

The TLP 3844-Z has a high-quality 300 dpi printhead for printing high-resolution labels and tags. Text, bar codes and graphics can be printed with great clarity on small labels. Scanning and reading data is made easier by the sharp, crisp print quality. For applications requiring a great deal of information in a small space, higher density printing is recommended. The 3844-Z is an ideal printing solution to support the growing number of new bar code symbologies, such as Datamatrix, RSS-14 & RSS-Composite.

- Superior Processing**

Powered by the same class of microprocessor as Zebra's mighty *XIIIPlus™ Series*, the 3844-Z is a desktop printer with great horsepower. Delivering swift throughput for fast and efficient printing of complex label formats, the 3844-Z can boost application productivity with ease.

- Best Integration: Flexible Connectivity and Advanced Networking Capability**

Designed with easy application integration in mind, the 3844-Z offers versatile connectivity choices, and comes with a standard triple interface - serial, parallel and USB.

Standard USB Port

USB (Universal Serial Bus) is the latest standard in peripheral interfaces – Most new PCs are being manufactured with USB ports. USB makes adding peripheral devices very simple and the 'one plug fits all' connection adds many features and benefits to the 3844-Z:

USB Features	Function	Benefits
Daisy Chaining	Provides the ability to connect multiple printers to the same PC via the PC USB ports or via a USB hub	Run multiple print jobs off one PC, and/or connect multiple peripherals from a single port
"Hot-swapping"	Add a printer without shutting down the PC	Without having to shutdown and reboot, no time or documents are lost, HOT plug n play
Standardized Plug and Port	One standardized port for any peripheral device with its own unique shape. Standard cable with unique shaped connector.	Quick and easy installations. No add-in cards to install or dip switches to configure, just plug in and run
USB connectivity available on a wide range of peripherals	Use USB hubs to establish the number of ports you need and plug all your peripheral devices via USB. No additional I/O cards to configure.	User does not need to be with the printer to detect an error. This is especially important for Daisy Chaining: know which printer may be down without having to check each individually.

The Power of ZebraLink

Additionally, the optional internal ZebraNet PrintServer II interface is available for the 3844-Z, providing quick and easy integration into Ethernet network environments. Notably, because this option is internal to the printer, with the Ethernet port on the back panel, there is no external Ethernet device taking up space; this eliminates a potential point-of-failure and preserves the small desktop footprint of the 3844-Z.



When combined with the power of **ZebraLink**, this printer is an excellent network printer, with the benefit of the remote printer control and management tools provided with ZebraNet software utilities.

ZebraNet View software searches the network to identify online Zebra printers, including devices that have not been configured. Configuring the new printers to the network is easy using the point and click Graphical User Interface of ZebraNet View.

ZebraNet Alert utility monitors the status of Zebra networked printers, and reports back error conditions. A wide range of printer status and error conditions can be communicated by the 3844-Z and sent back to a remote network manager. Further, a remote network manager can access the ZebraLink webpage within the 3844-Z, and execute printer control changes such as altering a darkness setting, or updating the contents of a label format stored in the printer's memory.

- **Practical Design – Simple to use and durable**

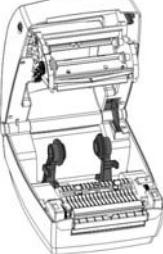
The Zebra Desktop Series share common practical design features to ensure that the printers are very simple to load and operate. The OpenACCESS design facilitates label loading and maintenance. Access to media is maximized as the print head is located out of the way in the top lid – the ribbon mechanism on the thermal transfer model is also built into the top lid. Lockable self-centering media guides snap the media securely in place, simplifying loading and preventing label jams. Color-coded components indicate which parts to use for printer loading and operation.

Dual wall construction ‘ruggedizes’ the 3844-Z printers making them sturdy and dependable. This tough casing protects the inner mechanisms and media from dirt, dust and damage, reducing downtime and improving efficiency.

Features and Benefits of the 3844-Z

FEATURE	FUNCTION	END-USER ADVANTAGE	CHANNEL BENEFIT
SUPERIOR PROCESSING			
New 32-bit Processor	Provides horsepower for fast throughput.	Enhanced productivity:- the 3844-Z can process complex label formats fast. Enables printer to keep up with fast data protocols.	Best performance in a desktop – same processor as the Xill Plus. Adds muscle to a desktop printer and allows greater degree of flexibility with application integration.
4 ips print speed	Print speed programmable at 2,3 and 4 inches per second.	Print speed can be selected to best suit the application requirements for print quality, media handling and throughput.	Printer is versatile and can be sold into a variety of applications.
VERSATILE CONNECTIVITY			
Standard Triple Communications Interfaces	The 3844-Z is equipped standard with serial (RS232-DB9), parallel and USB interfaces.	Easy integration into existing local or networked systems. New PCs are now manufactured with USB ports as standard –as new technologies are developed, USB is the interface of choice. The 3844-Z will not need to be replaced if new PCs are introduced to existing systems.	Triple interface reduces complex ordering procedures with different interface configuration part numbers. No need to hold inventory of printers with various communication interfaces. Increased selling opportunities with drop-in integration to existing systems.
Internal ZebraNet PrintServer II Option.	Provides fast and easy integration into Ethernet network environments. Supports TCP/IP and SPX/IPX protocols and can print from AS/400 via TCP/IP. Supports DHCP dynamic IP address assignment. A web-enabled solution.	Easy to connect to Ethernet networks. The simple to use printserver is internal to the printer, with the Ethernet port on the back panel – no external device to take up valuable space and potentially get knocked and causing communication failure. The 3844-Z is	For applications that require remote management or network printing, the 3844-Z offers the internal Ethernet capability as part of the printer ordering options.

FEATURE	FUNCTION	END-USER ADVANTAGE	CHANNEL BENEFIT
		ZebraLink enabled, providing benefits of remote printer control and management tools provided with ZebraNet software utilities.	
ADVANCED NETWORKING			
ZebraLink Connectivity and control 	Enables remote monitoring and control of any 3844-Z connected to an Ethernet network via ZebraNet PrintServer II. ZebraNet View & ZebraNet Alert software tools...	Advanced yet easy to use management of printers on an Ethernet network. Change and manage printer settings and configuration with ZebraNet View. Receive printer status notifications in real time via pager, email or cell phone with ZebraNet Alert.	Advanced networking tool is standard with these printers (with optional ZebraNet PrintServer II) versus a payable option on competitive printers. Offers convenience and control to network administrators – freedom to program and monitor networked printers from anywhere in the world.

FEATURE	FUNCTION	END-USER ADVANTAGE	CHANNEL BENEFIT
EASE OF USE			
OpenACCESS™ Design	 <p>Label loading is greatly simplified. Access to the media compartment is maximized as the printhead is built into the top lid. Lockable self-centering media guides snap the media securely into place, simplifying loading and preventing label jams.</p>	<p>Label rolls are loaded easily and can be aligned accurately ensuring quality printing for every print run.</p> <p>Maintenance and cleaning are facilitated.</p>	<p>Easy-to-operate printer reduces training and support requirements. Very few components mean less servicing and fewer spare parts.</p>
Easy to load ribbon	<p>The TLP 3844-Z ribbon mechanism is located in the top lid, allowing for easy ribbon threading.</p> <p>Ribbon sensing detects both ribbon out and ribbon broken conditions</p>	<p>No time wasted trying to thread ribbon in awkward spaces.</p> <p>Downtime reduced thanks to easy to use design and useful ribbon sensing.</p>	<p>Easy-to-operate printer reduces training and support requirements.</p>
Color Coded Components	<p>Moveable parts and access points are color-coded, including FEED key, latches and label guides.</p>	<p>Simplifies printer operation.</p>	<p>Reduces training requirements and using the printer is simplified.</p>
Clear Media Cover	<p>Clear window in the top cover allows media usage to be monitored.</p>	<p>Downtime is kept to a minimum as media status can be monitored</p>	<p>Printer design improves efficiency.</p>
ROBUST CONSTRUCTION			
Double-Wall Casing	<p>With double-wall ABS enclosure construction, the 3844-Z is sturdy and rugged for its size.</p> <p>The printhead, printer mechanisms and media are protected from dust, dirt and damage.</p>	<p>Long lasting enclosure reduces printer downtime. Reliability is improved, reducing need for repairs.</p> <p>Lower cost of ownership.</p>	<p>This printer has a far more solid feel than similar products on the market. Compact, yet sturdy, the 3844-Z can be sold into a wider variety of operating environments.</p>

FEATURE	FUNCTION	END-USER ADVANTAGE	CHANNEL BENEFIT
APPLICATION FLEXIBILITY			
ZPL II	The 3844-Z is equipped with ZPL II Zebra's printer control and command language	Provides powerful label design and formatting commands for the 3844-Z – provides control of printer settings such as darkness or print mode. Compatibility with existing applications written for Zebra printers	Easy to use programming language provides application flexibility where needed.
300 DPI Print Resolution	The 3844-Z has a 300 dots-per-inch printhead for high-density printing.	Ideal for applications requiring a lot of text or complex graphics/bar codes on a small label. High-density printing provides a better & more accurate scan rate.	3844-Z offers competitive value with the most flexible connectivity combinations, RSS-14 & RSS Composite support and Zebra's reputation for high quality.
Scalable fonts scalable	The 3844-Z supports scalable fonts, including any True-Type® font	Scalable fonts promote improved print quality and added support for corporate image standards.	Superior print quality for increased customer satisfaction. Ability to reproduce specific label designs required in today's high-tech markets.
Font Sets	Western fonts standard Asian Font sets optional. (See price page for more details)	Printer supports global labeling requirements. The standard model incorporates all European character sets, no need to upgrade. Optional Asian character support is available for local or special applications.	No special memory options and additional support required for the 3844-Z. Global markets are supported and competitive advantage is increased.
Flash Memory	4MB Flash memory standard (2.75MB available to user)	Firmware, forms, fonts and graphics are permanently stored in the printer and can be easily downloaded from a PC.	4MB (2.75 available to user) flash memory gives competitive value and performance

FEATURE	FUNCTION	END-USER ADVANTAGE	CHANNEL BENEFIT
SDRAM	8MB SDRAM (4MB available to user) standard is dedicated to image processing, enabling the 3844-Z to print longer label lengths (39")	Increased SDRAM allows more image buffer availability for longer label formats. Printer can be configured to match exact application requirements.	Memory options increase competitive advantage and performance in more demanding applications.
Zebra E ³ heat history control	Zebra's energy control system provides high quality printing over a range of speeds and materials.	Satisfies customer print quality requirements for bar codes, text and graphics with dependable scanning results.	Can confidently sell Zebra's reliable print quality over a range of print applications.
MEDIA HANDLING			
Media Types	The 3844-Z supports a variety of different media types including paper, tags, liner-free, die-cut and fanfold). The printer has gap, notch and black-mark sensing capabilities as well as media out. Additional functions such as media cutting, label dispensing and liner and/or label rewind are available as options.	Versatile media choices for specific application needs. Increased productivity and convenience. Use Genuine Zebra supplies for optimum performance in any application.	Supporting a wide variety of media makes this printer ideal for a variety of applications.
Off-Center Gap/Black Line Sensor	The 3844-Z features a dual sensor system with both reflective and transmissive sensors. The off-center location of the sensor enables it to sense 2-across label media, unlike its predecessors.	Two-across type label media can be used on the 3844-Z. The user does not have to adjust the printer's sensor to switch between different kinds of labels.	By using a wider variety of labels, this printer can be used in a large number of applications.

3844-Z Specifications

Standard Features

- 300 dpi print resolution (12 dots/mm)
- Direct and Thermal transfer printing of bar codes, text, and graphics
- OpenACCESS design for easy media loading
- ABS double walled casing
- Fully enclosed 5.0" (127mm) media compartment
- ZPL® or ZPL II® programming language, software selectable
- 32 bit RISC processor
- 8MB Standard SDRAM Memory (4MB available to user)
- 4MB Standard Flash Memory (2.75 MB available to user)
- Standard (Level 1) E³ Dot History Control
- Bi-directional Centronics® parallel (36 Pin) Communication port
- Auto-Calibration
- Scalable fonts
- Auto-switching 120V and 240V power supply
- 2D Symbologies
- Transmissive and reflective media sensing
- Programmable print speeds of 2 ,3 and 4 inches/second (ips)
- Standard Tear-off mode feature
- NEW ZebraLink™ - the revolutionary real-time connectivity control solution:
⇒ *WebView / Alert* – (requires optional ZebraNet™ PrintServer II)

Optional Features

- **8MB Flash Memory w/ Real Time Clock:** for applications requiring additional levels of memory and time and date information for applications that require date or freshness coding.
- **Label Dispenser** – Label peel and present with label taken sensor.
- **Internal or External ZebraNet® Print Server II** – enables Ethernet 10Base-T network print capability.
- **Cutter**
- **Font Packs**
- **External Rewinder**
- **Media Adapter Guide**

Software

- **ZPL and ZPL II Zebra Programming Language** – The 3844-Z printer comes equipped with ZPLII – the universal language of Zebra printers – ensures easy integration into existing systems that run Zebra printers – without the need for additional software.
- **Flash Upgradeable Firmware** – flash memory can be easily upgraded via parallel or USB port download from a computer.

Printing Specifications

- Resolution: 300 dots/inch (dpi) (12 dots/mm)
- Dot Pitch: 0.0049" (0.125mm)
- Maximum print length: 39" (990mm) w/Std memory
- Minimum print length: 0.005" (0.125mm – one dot)
- Maximum print width: 4.09" (104mm)
- Minimum print width: 0.005" (0.125mm – one dot)
- Programmable print speed: 2,3 and 4 ips (51,76 and 102mm/s)

Ribbon Specifications

NOTE: For optimum print quality and printer performance, use of Zebra genuine ribbon is recommended as well as a notched ribbon core.

- Ribbon Width: 1.30 inches (33 mm) to 4.30 inches (110 mm).

- Ribbon Capacity: The capacity of the ribbon roll is to be sufficient enough to completely print one roll of media. (1 roll of 5"OD media is the full ribbon capacity)
- Core ID: 0.5" (12.7 mm).
- Ribbon OD: 1.3" (33 mm).
- Ribbon Length: 244' (74m) using 0.000328" ribbon thickness
- Ribbon Type:Wax, wax/resin and resin.

Media Specifications

NOTE: For optimum print quality and printer performance, use of Zebra genuine supplies is recommended.

- Media Width - 1.00" (25.4mm) – 4.25" (108mm)
- Label Length:
Minimum - 0.38" (9.7mm)
Minimum with label taken sensor used - 0.50" (12.7mm)
Minimum with cutter – 1.0" (25.4mm)
Maximum with standard memory - 39" (990mm)
- Core Inner Diameter: 1.00" (25.4mm), 1.5" (38mm)
- Max Roll Diameter: 5.00" (127mm)
- Media Thickness: 0.003" (0.075mm) - 0.007" (0.18mm)
- Media Sensing: gap, black line, notch
- Media Types - Roll-fed or fan-fold, die cut or continuous direct thermal labels with or without black mark, tag stock

Calibration Procedure

- The 3844-Z is equipped with a standard auto-calibration feature that initiates automatically during start-up of the printer - utilizing two to four labels to calibrate for efficient operation and less waste. The printer will also save the new settings in memory until the next calibration is performed.
- A manual calibration procedure can also be performed, if required. Consult your User's Guide for more details on the specific manual calibration steps.

Font Specifications: 300 dpi (12 dots/mm)

Fonts	Matrix (in dots) (H x W)	Type†	Minimum Char. Size (H x W)	Maximum C.P.I.
A	9 x 5	U-L-D	.030" x .020"	50.8
B	11 x 7	U	.037" x .030"	33.8
C,D	18 x 10	U-L-D	.060" x .040"	25.4
E	41 x 20	OCR-B	.138" x .085"	11.5
F	26 x 13	U-L-D	.085" x .053"	19.06
G	60 x 40	U-L-D	.200" x .160"	6.36
H	30 x 19	OCR-A	.100" x .098"	10.02
GS	24 x 24	SYMBOL	.80" x .80"	12.7
P-V		U-L-D		
Ø	15 x 12	U-L-D	Scalable (Smooth) Font	

- Character Fonts: Standard bitmapped Zebra fonts: A, B, C, D, E (OCR-B), F, G, H, (OCR-A), GS, P, Q, R, S, T, U, V & Ø Smooth font (CG Triumvirate™ Bold Condensed).
- Character Sets: IBM® Code Page 850 International characters & graphic symbols
- Supports user defined fonts and graphics – including custom logos
- Bitmap fonts are expandable up to 10 times, height and width independent. Fonts E and H (OCR-B and OCR-A), however, are not considered in spec when expanded.
- Smooth scalable font Ø (CG Triumvirate™ Bold Condensed) is expandable dot-by-dot, height and width independent, while maintaining edges to a max. 1500 x 1500 dots.
- IBM® Code Page 850 International Characters available in fonts A,B,D,E,F,G and Ø through software control.

Bar Code Symbologies & Specifications

- Bar code ratios: 2:1 (non-rotated) and 3:1

- Linear bar codes: Code 11, Code 39, Code 93, Code 128, UPC-A, UPC-E, EAN-8, EAN-13, EAN-14, UPC-A and UPC-E with EAN 2 or 5 digit extensions, Plessey, POSTNET, Standard 2 of 5, Industrial 2 of 5, Interleaved 2 of 5, LOGMARS, MSI, Codabar, RSS-14 , Limited, truncated & stacked.
- 2-dimensional bar codes: PDF417, MicroPDF-417, Code 49, Maxicode, Codablock, Datamatrix, and QR code. RSS Composite

Zebra Programming Language (ZPL/ ZPL II)

- Communicates in printable ASCII characters
- Compatible with mainframe, mini, and PC hosts
- Downloadable objects include graphics and bitmap fonts, label templates and formats
- Automatic memory allocation for format while printing
- Automatic serialization of fields
- Format inversion (white on black)
- Mirror-image printing
- Four position field rotation (0°, 90°, 180°, 270°)
- Slew command
- Programmable label quantities with print, pause
- Status messages to host upon request

Communications Specifications

- Centronics® Parallel (36 Pin) connector ports
- USB v1.1
- RS 232 Serial
- Ethernet via internal ZebraNet PrintServer II (optional)

Electrical Specifications

- Auto-detectable (PFC Compliant) 100-240VAC, 50-60Hz

Agency approvals

Emissions: FCC Part 15, Subpart B, VCCI, C-Tick

Emissions and Susceptibility: (CE): EN55022 Class-B, EN61000-3-2, EN61000-3-3 and EN55024

Safety: CB Scheme IEC 60950:1991 +A1 +A2 +A3 +A4, UL 60950 and C-UL, IRAM, NOM, AAMI

Physical Specifications (Printer only, no options installed)

TLP 3844-Z	
Height	6.8" (173mm)
Width:	7.8" (198mm)
Depth:	9.4 (238mm)
Weight:	3.7lbs (1.7kg)

Environmental Specifications

- Operating Temperature: 40° to 105°F (5° to 41°C)
- Storage Temperature: -40° to 140°F (-40° to 60°C)
- Operating Humidity: 10% to 90% non-condensing R.H.
- Storage Humidity: 5% to 95% non-condensing R.H.

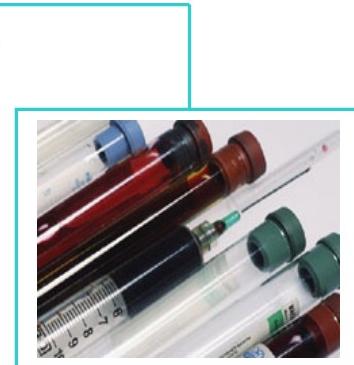
Preventative Maintenance

- Zebra recommends cleaning the printer on a regular basis using standard Zebra printer parts and cleaning supplies. Consult your *User's Guide* for further details.

Target Markets and Applications

Health Sciences

Area	Application
Hospitals and Clinics	Patient ID
Outpatient and day surgery centers	Patient progress and treatment history
Laboratories	Specimen labeling and tracking
Pharmacies	Pharmaceutical labels
Pharmaceutical companies	Prescriptions
Dentistry	Specimen labeling Teeth mold labeling



Application Focus

Vial Labeling: Tracking samples and specimens is efficient with the TLP 3844-Z. When a specimen is taken, the vial is labeled and a corresponding label placed on the paperwork. The vial label must contain vital data, such as patient identification, tests to be carried out, type of sample, medical staff ID, site and time/date – all of which must be compacted into a tiny space. The 300 dpi TLP 3844-Z is able to print sharp, clear human readable text and a high-density bar code (such as Data Matrix or RSS-14) to contain all the necessary data.

The 3844-Z brings additional benefits to the healthcare industry, notably the ability to be networked (via the optional internal ZebraNet PrintServer II) and remote administered using ZebraLink as well as become a valuable shared printer resource – this is useful when multiple users need to use and print data from medical database management systems.

The TLP 3844-Z design makes it very easy to use – loading media is easy, a very important factor for busy medical personnel such as phlebotomists and administrators. The compact printer fits on a countertop and takes up very little space in a congested laboratory work area.

Prescription bottle labeling: Pharmacies, both in retail and hospital settings use the 3844-Z to print prescription bottle labels. A customer presents the prescription to the pharmacist, who enters the details on to the computer system – a bar coded work order is generated and the pharmacist goes to fill the prescription bottle from the stores. Using a hand-held scanner, the pharmacist scans the bar code on the order, and a label containing customer details, the drug name and instructions for taking the medication is printed on 3844-Z. The label is applied to the prescription bottle.

3844-Z Advantage

- ✓ High-resolution printhead provides ability to print clearly on very small vial and test tube labels.
- ✓ Ethernet connectivity with internal ZebraNet PrintServer II allows integration with the laboratory network.
- ✓ ZebraLink remote management allows printers to be controlled and monitored from a central location – not necessarily on site.
- ✓ Easy ribbon and label loading (even when wearing surgical gloves).
- ✓ Two-dimensional bar code support, for encoding a lot of data in a small space.
- ✓ Desktop printer offers value for money and the right print volume to printer size ratio.
- ✓ Compact footprint is vital for saving space in cramped laboratory areas.
- ✓ Very low maintenance requirements.

Light Manufacturing

Area	Application
Electronic component manufacturers	Product identification
Sub-assembly suppliers	Asset tracking



Application Focus

Product Marking: Manufacturers of computer components use the TLP 3844-Z to print tiny labels to identify small parts such as chips, processors and CPU boards. The 300 dpi TLP 3844-Z is able to print fine text and barcodes on these very small labels so that they are clear, crisp and human readable as well as providing a highly accurate scan rates. A surprising amount of data can be packed into a small component label due to high-density printing and two-dimensional bar code symbologies which allow more detailed information to be embedded into the bar code. Bar coding facilitates asset management and sub-assembly suppliers are able to track the assembly process with the bar coded components.

When configured with the internal ZebraNet PrintServer II, one or more TLP 3844-Z printers can be connected to ERP systems via Ethernet and become a seamless part of any company network. The compact printer does not take up much room on workstations, freeing space for manufacturing and assembly.

Agency labels: Manufacturers of electronic goods and devices (from computers to televisions to label printers) are required to place a label on their product to denote certification by agencies such as UL or FCC. The agency logo, fine print and the bar code must be visible and clearly printed. The 300 dpi 3844-Z is ideal for printing these labels and Zebra actually uses them to print agency labels for the desktop printers!

3844-Z Advantage

- ✓ High-density print capability for best quality graphics & text on small labels.
- ✓ Internal Ethernet connectivity to enable shared printing.
- ✓ ZebraLink advanced network management allows remote printer management.
- ✓ RSS-14 and two-dimensional bar code technology support for encoding more data.
- ✓ Compact & sturdy printer for maximizing workspace and surviving high-traffic work environments.



Product Differentiation

	3844-Z	3842™	3742™
STANDARD FEATURES			
Print Speed (ips)	4 ips (102 mm/s)	2.5 ips (64 mm/s)	2 ips (51 mm/s)
Resolution (dpi)	300 dpi (12 dots/mm)	300 dpi (12dots/mm)	300 dpi (12dots/mm)
Print Width (max. in.)	4.09" (104 mm)	4.09" (104 mm)	4.09" (104 mm)
Max. Print Length (Std. in.)	39" (990 mm)	11" (279 mm)	10" (254 mm)
Max. Print Length (Upgraded in)	N/A	22" (559 mm)	20" (508 mm)
Media Capacity	5" Roll (127mm)	5" Roll (127mm)	5" Roll (127mm)
Transmissive (Gap) Sensor	YES	YES	YES
Ribbon Capacity (TLP)	2,930" (74m)	2,930" (74m)	3600" (91m)
Head-Up Sensor	YES	YES	NO
Bitmapped Fonts	YES	YES	YES
Frame Construction	Double-walled plastic	Double-walled plastic	Single-wall plastic
Firmware	FLASH	FLASH	FLASH
Standard RAM	8MB SDRAM (4MB user avail.)	512 KB SRAM	512KB SRAM
Standard Flash Memory	4MB (2.75MB user avail.)	1MB	1MB
Std. International Character Sets	YES	YES	YES
Font, Graphic and Form Storage	FLASH	FLASH	FLASH
Auto-calibration Feature	YES	YES	YES
Interface	Serial, Parallel & USB	Serial, Parallel & USB	Serial & parallel
Programming Language	ZPL II	EPL 2	EPL 2
OPTIONS			
SRAM Upgradable to :	N/A	1.2MB Total	1 MB
Optional Asian Fonts	YES	YES	NO
Flash Memory Upgrade	8MB (12MB total & 10.75 user avail.)	N/A	N/A
Real Time Clock	YES	YES	YES
Keyboard Display Unit	NO (not natively)	YES	YES
Label Dispenser	YES	YES	YES
ZebraNet PrintServer II	Internal & External	Internal & External	External only
ZebraLink Enabled	YES	NO	NO
Reflective (black line) Sensor	Standard	Standard	OPTIONAL
External Rewind	YES	YES	YES
Cutter	YES	YES	YES
LIST PRICE (N. America)	\$895	\$845	\$845

Competitive Analysis

The following pages were compiled from the latest manufacturer's product information as of the date of this document. In cases where conflicting product specification or functionality information was discovered between a given manufacturer's printed or on-line material, the manufacturer was contacted directly for clarification.

Products were acquired for purposes of hands-on competitive analysis performed by engineering and product management teams.

Performance testing was performed as follows:

Test Station

All products were tested from the same PC.

- Compaq DeskPro 166Mhz Pentium with MMX, 64Mb RAM and equipped with Microsoft Windows 95.
- All serial interface test-runs were performed using the same high-quality shielded RS-232 serial cable.
- All parallel interface test-runs were performed using the same high-quality fully-shielded IEEE 1284 parallel cable.

Test Labels:

All labels were created by hand-coding two real-world label formats with barcodes using the manufacturer's specific label programming language. These were produced as identically as possible across manufacturers. This procedure isolated the performance characteristics of each tested unit to that of the device's controller electronics and motion dynamics; i.e., no driver overhead or variability.

- AIAG compliance label
- K-Mart compliance label
- For multi-label test runs, 50 unique sets of numeric data was modified in the label program, terminated with a memory-flush statement in each, and concatenated into one file.

Methodology:

- The PC was booted in DOS mode for each test-run.
- Label programs were downloaded from the DOS prompt using proprietary parallel and serial file downloading utilities.
- All parallel tests were performed in ECP mode as set in the PC's BIOS.
- All serial tests were performed @38.4kbs as set by the serial downloading utility.

Timing:

- Timing was performed commencing the test from actuation of the PC's [ENTER] key to start the download, and concluding at the point in time when the trailing-edge of each label (in the case of first-label-out tests), or when the last of 50 labels (in the case of multi-label tests), ceased forward movement.
- Three (3) test-runs were performed for each of the two label designs (x) both PC interfaces (x) both single and multi-label combinations, for a total of 24 independent tests for each product. (3 runs x 2 label types x 2 I/Fs x 2 label volumes.) An average time for each three-run test was then calculated for every combination, resulting in eight (8) summary charts. A calibrated Fisher Scientific NIST-traceable timing device was used to monitor each even.

The following charts (Figures 1 & 2) show performance timing results (in seconds) for the TLP 3844-Z versus competitive 300 dpi 4-inch label printers. Parallel port communications were used in obtaining these timings.

Figure 1: First label out - Kmart and AIAG Labels
Measured in seconds, for completion of one label.

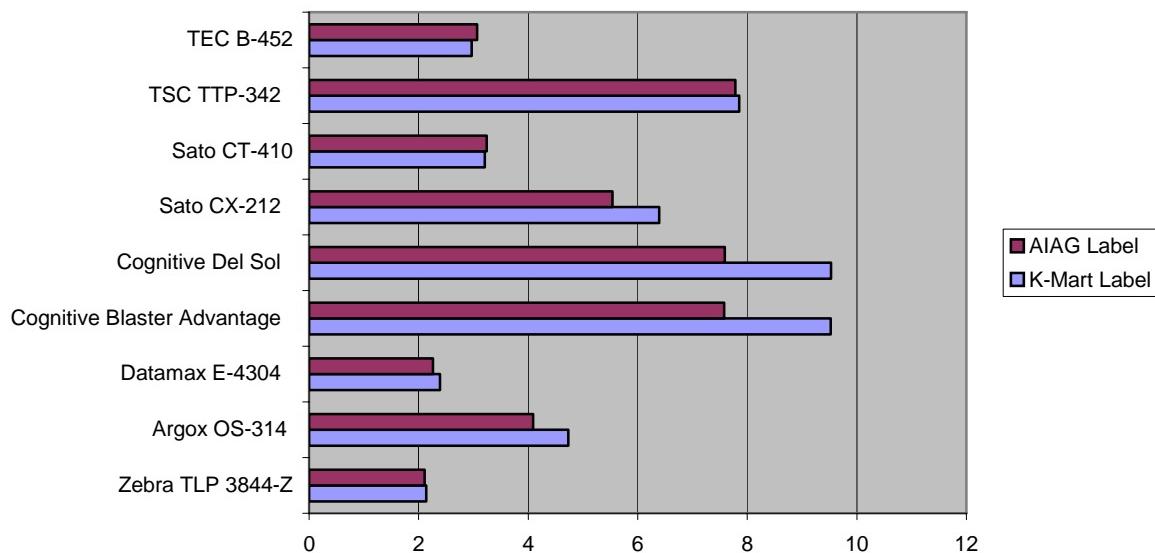
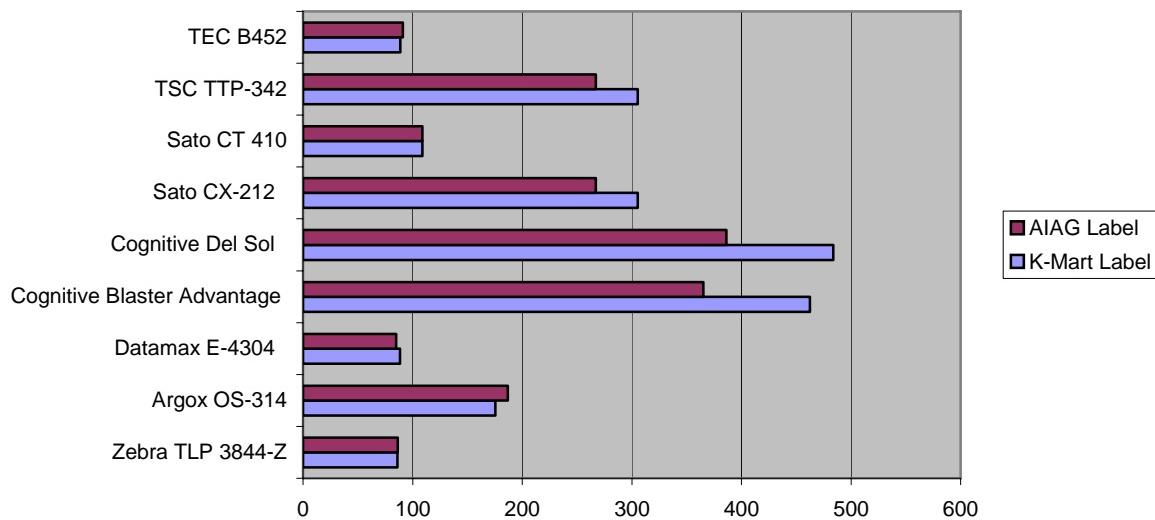


Figure 2: 50 labels out - Kmart and AIAG Labels
Measured in seconds, for completion of 50 labels of unique variable content.



Zebra TLP 3844-Z vs. Argox OS-314

Price & Warranty	Zebra	Argox
Model #	TLP 3844-Z	OS-314 TT
List Price:	\$895	\$1095
Printer Warranty:	1 Year	1 Year
Print Head Warranty:	6 Months	90 Days
Print Features		
Printer Type:	Direct and Thermal Transfer	Direct and Thermal Transfer
Print Speed:	4 IPS (102mm/sec.)	2 IPS (51mm/sec.)
Printhead Resolution:	300 DPI (12 dots/mm)	300 DPI (12 dots/mm)
Flash:	4MB	2MB
SRAM:	8MB SDRAM	512KB
Physical Features		
Footprint (D x W x H):	9.75" x 7.9" x 6.8" (248mm x 201mm x 173mm)	10.9" x 7.3" x 6.0" (278mm x 186mm x 153mm)
Weight:	3.2 lbs. (1.4 kg.)	4.6 lbs. (2.1 kg.)
Imaging Features		
Rotated (0°, 90°, 180°, 270°):	Y	Y
# of Resident Fonts:	10	5
Expandable Vertically & Horizontally:	10x	24x
Smooth Fonts:	Y	Y
Media Features		
Maximum Media Width:	4.25" (108 mm)	4.3" (110mm)
Minimum Media Width:	1.0" (25.4 mm)	1.0" (25mm)
Maximum Media Length:	39" (991 mm)	45" (1,143mm)
Minimum Media Length:	0.38" (9.7mm)	0.4" (10mm)
Thickness:	0.003" - 0.007" (0.08 mm - 0.18 mm)	0.0025" - 0.010" (0.0635mm - 0.25mm)
Maximum OD (Outside Diameter):	5.0" (127 mm)	4.3" (109mm)
Minimum ID (Inner Diameter):	1.0" (25.4 mm)	1.0" (25mm)
Ribbon Length:	2,928" (74M)	3,600" (91M)
Connectivity		
Centronics Parallel:	Y	Y
RS-232 C:	1,200 - 38,400 bps	2,400 bps - 38,400 bps
USB:	Y	N
Options & Accessories		
Expandable Memory:	OPT. 8MB Flash = \$349	512KB
Black Line sensor:	STD.	STD.
Label Taken Sensor:	OPT. = \$35	OPT.
Cutter:	OPT. = \$300	OPT.
Rewinder:	OPT. = \$395	8" OD
Real Time Clock:	OPT.w/exp. Mem. = \$349	OPT
Keyboard Display Unit:	N/A	OPT
Ethernet Connectivity(Internal):	OPT. = \$249	N/A
Ethernet Connectivity(External):	OPT. = \$299	OPT. = \$250
Asian Font Set:	OPT.	OPT.

Argox OS-314

A comparison of the most important features shows:

The OS-314 has a single walled cover that is not particularly rugged. The 3844-Z benefits from a durable enclosure with reinforced, dual walled construction.

The OS-314 hinge pins are inserted and could break off relatively easily. The 3844-Z has a rugged molded hinge.

The OS-314 only offers serial and parallel interfaces. The 3844-Z features serial, parallel, USB and optional internal Ethernet connectivity.

With its more restricted media pathway, the OS-314 does not benefit from the OpenACCESS design of the 3844-Z, which enables optimum ease of use. The OS-314 has a removable media spindle which could easily be lost or misplaced. The 3844-Z has a rack and pinion style centered media holder for drop-in media loading.

The 3844-Z has color-coded operator cues for ease of use, whereas the OS-314 does not.

The 3844-Z has a dynamic 32-bit microprocessor for faster throughput and is 121% faster "time to first label" compared to the OS-314.

Zebra TLP 3844-Z vs. Taiwan Semiconductor TTP 342

Price & Warranty	Zebra	Taiwan Semiconductor Co., Ltd
Model #:	TLP 3844-Z	TTP-342
List Price:	\$895	\$850
Printer Warranty:	1 Year	2 Years
Print Head Warranty:	6 Months	1 Year or 1,000,000 Inches
Print Features		
Printer Type:	Direct and Thermal Transfer	Direct & Thermal Transfer
Print Speed:	4 IPS (102mm/sec.)	2 IPS (50mm/sec)
Printhead Resolution:	300 DPI (12 dots/mm)	300 DPI (12 dots/mm)
Flash:	4MB	1MB
SRAM:	8MB SDRAM	1MB DRAM
Physical Features		
Footprint (D x W x H):	9.75" x 7.9" x 6.8" (248mm x 201mm x 173mm)	11.3" x 9.1" x 6.2" (288mm x 232mm x 156mm)
Weight:	3.2 lbs. (1.4 kg.)	5.9 lbs. (2.7 kg.)
Imaging Features		
Rotated (0°, 90°, 180°, 270°):	Y	Y
# of Resident Fonts:	10	5
Expandable Vertically & Horizontally:	10x	8x
Smooth Fonts:	Y	N
Media Features		
Maximum Media Width:	4.25" (108 mm)	4.4" (114mm)
Minimum Media Width:	1.0" (25.4 mm)	1.0" (25mm)
Maximum Media Length:	39" (991 mm)	40" (1,016mm)
Minimum Media Length:	0.38" (9.7mm)	0.24" (6mm)
Thickness:	0.003" - 0.007" (0.08 mm - 0.18 mm)	0.002" - 0.010" (0.06mm - 0.25mm)
Maximum OD (Outside Diameter):	5.0" (127 mm)	4.3" (109mm)
Minimum ID (Inner Diameter):	1.0" (25.4 mm)	1.0" (25mm)
Ribbon Length:	2,928" (74M)	984' (300M)
Connectivity		
Centronics Parallel:	Y	Y
RS-232 C:	1,200 - 38,400 bps	2,400 - 19,200 bps
USB:	Y	NO
Options & Accessories		
Expandable Memory:	OPT. 8MB Flash = \$349	4MB
Black Line sensor:	STD.	STD.
Label Taken Sensor:	OPT. = \$35	STD.
Cutter:	OPT. = \$300	OPT. = \$250
Rewinder:	OPT. = \$395	8.4"OD
Real Time Clock:	OPT.w/exp. Mem. = \$349	STD.
Keyboard Display Unit:	N/A	OPT. = \$250
Network Connectivity(Internal):	OPT. = \$249	N/A
Network Connectivity(External):	OPT. = \$299	N/A
Asian Font Set:	OPT.	OPT.

TSC TTP 342

Serial and parallel interfaces are only available whereas the 3844-Z benefits from triple communication interfaces – serial, parallel and USB.

No Ethernet option available for the TTP 342 whereas the 3844-Z offers internal ZebraNet PrintServer II for easy connection to Ethernet networks.

The TTP-342 printers have no smooth font capability.

The TTP 342 is not as user-friendly when compared to the 3842 with its OpenACCESS design. Access to the media path is restricted and media is hard to load. The user must open the top cover and then the print mechanism to access media pathway. There are no removable parts, such as media roll holder, on the 3844-Z. On the TTP 342, these parts could easily get lost or misplaced.

The TTP 342 footprint is 8% larger than the 3844-Z. The Zebra 3844-Z printer is a more compact, space saving desktop printing solution

The TTP 342 has a single walled cover that is somewhat flimsy. The 3844-Z enclosure is durable and reinforced with dual walled construction.

The 3844-Z has a dynamic 32-bit microprocessor for faster throughput and is 264% faster "time to first label" compared to the TTP 342.

Zebra TLP 3844-Z vs. Sato CX-212 TT

Price & Warranty		Zebra	Sato	Sato CX-212 TT
Model #:	TLP 3844-Z	CX-212TT		
List Price:	\$895	\$845		
Printer Warranty:	1 Year	1 Year		
Print Head Warranty:	6 Months	500,000"		
Print Features				
Printer Type:	Direct and Thermal Transfer	Direct & Thermal Transfer		
Print Speed:	4 IPS (102mm/sec.)	3 IPS (75mm/sec.)		
Printhead Resolution:	300 DPI (12 dots/mm)	300 DPI (12 dots/mm)		
Flash:	4MB	512KB		
SRAM:	8MB SDRAM	512KB		
Physical Features				
Footprint (D x W x H):	9.75" x 7.9" x 6.8" (248mm x 201mm x 173mm)	10" x 6.9" x 6.6" (254mm x 175mm x 168mm)		
Weight:	3.2 lbs. (1.4 kg.)	3.6 lbs. (1.63 kg.)		
Imaging Features				
Rotated (0°, 90°, 180°, 270°):	Y	Y		
# of Resident Fonts:	10	12		
Expandable Vertically & Horizontally:	10x	12x		
Smooth Fonts:	Y	Y		
Media Features				
Maximum Media Width:	4.25" (108 mm)	4.65" (118mm)		
Minimum Media Width:	1.0" (25.4 mm)	2.0" (50mm)		
Maximum Media Length:	39" (991 mm)	12.6" (320mm)		
Minimum Media Length:	0.38" (9.7mm)	0.375" (9.5mm)		
Thickness:	0.003" - 0.007" (0.08 mm - 0.18 mm)	0.003" - 0.007" (0.076mm - 0.18mm)		
Maximum OD (Outside Diameter):	5.0" (127 mm)	5.0" (127mm)		
Minimum ID (Inner Diameter):	1.0" (25.4 mm)	1.0" (25mm)		
Ribbon Length:	2,928" (74M)	459' (140M)		
Connectivity				
Centronics Parallel:	Y	Y		
RS-232 C:	1,200 - 38,400 bps	600 bps - 19,200 bps		
USB:	Y	NO		
Options & Accessories				
Expandable Memory:	OPT. 8MB Flash = \$349	2MB or 4MB		
Black Line sensor:	STD.	STD.		
Label Taken Sensor:	OPT. = \$35	N/A		
Cutter:	OPT. = \$300	NO		
Rewinder:	OPT. = \$395	NO		
Real Time Clock:	OPT.w/exp. Mem. = \$349	NO		
Keyboard Display Unit:	N/A	NO		
Network Connectivity(Internal):	OPT. = \$249	NO		
Network Connectivity(External):	OPT. = \$299	?		
Asian Font Set:	OPT.	OPT.		

Zebra TLP 3844-Z vs. Datamax E4304

Price & Warranty	Zebra	Datamax
Model #	TLP 3844-Z	E-4304
List Price:	\$895	\$895
Printer Warranty:	1 Year	1 Year
Print Head Warranty:	6 Months	1 Year, or 1,000,000 Inches
Print Features		
Printer Type:	Direct and Thermal Transfer	Direct & Thermal Transfer
Print Speed:	4 IPS (102mm/sec.)	4 IPS (102mm/sec.)
Printhead Resolution:	300 DPI (12 dots/mm)	300 DPI (12 dots/mm)
Flash:	4MB	1MB
SRAM:	8MB SDRAM	2MB DRAM
Physical Features		
Footprint (D x W x H):	9.75" x 7.9" x 6.8" (248mm x 201mm x 173mm)	10" x 8.8" x 7.1" (254mm x 223mm x 179mm)
Weight:	3.2 lbs. (1.4 kg.)	5.2 lbs. (2.4 kg.)
Imaging Features		
Rotated (0°, 90°, 180°, 270°):	Y	Y
# of Resident Fonts:	10	10
Expandable Vertically & Horizontally:	10x	24x
Smooth Fonts:	Y	Y
Media Features		
Maximum Media Width:	4.25" (108 mm)	4.3" (109mm)
Minimum Media Width:	1.0" (25.4 mm)	1.0" (25mm)
Maximum Media Length:	39" (991 mm)	24" (610mm)
Minimum Media Length:	0.38" (9.7mm)	0.38" (9.65mm)
Thickness:	0.003" - 0.007" (0.08 mm - 0.18 mm)	0.0025" - 0.010" (0.0635mm - 0.254mm)
Maximum OD (Outside Diameter):	5.0" (127 mm)	5.0" (127mm)
Minimum ID (Inner Diameter):	1.0" (25.4 mm)	1.0" (25mm)
Ribbon Length:	2,928" (74M)	361' (110M)
Connectivity		
Centronics Parallel:	Y	Y
RS-232 C:	1,200 - 38,400 bps	600 bps - 38,400 bps
USB:	Y	NO
Options & Accessories		
Expandable Memory:	OPT. 8MB Flash = \$349	3MB = \$195
Black Line sensor:	STD.	STD.
Label Taken Sensor:	OPT. = \$35	OPT. = \$45
Cutter:	OPT. = \$300	OPT. = \$200 or \$495
Rewinder:	OPT. = \$395	OPT. = \$545
Real Time Clock:	OPT.w/exp. Mem. = \$349	OPT. = \$50
Keyboard Display Unit:	N/A	OPT. = \$295
Network Connectivity(Internal):	OPT. = \$249	N/A
Network Connectivity(External):	OPT. = \$299	OPT. = \$495
Asian Font Set:	OPT.	OPT.

Datamax E4304

The E4304 offers only serial and parallel interfaces. The 3844-Z has a broader range of connectivity choices, with standard serial, parallel and USB ports as well as optional internal Ethernet connectivity. The E4304 has external an Ethernet option

The E4304 removable media spindle could be lost or misplaced. The 3844-Z has rack and pinion style centered media holder for drop-in media loading.

The left-justified print mechanism on the E4304 does not always distribute printhead pressure as evenly as the center-justified mechanism on the 3844-Z.

Left justifying mechanism increases the risk of improper print registration based on media guide not being located at full left position.

The E4304 is not as user-friendly when compared to the OpenACCESS design of the 3844-Z. Access to the media path is restricted and media is hard to load. Both the upper cover and print mechanism must be opened to load media.

The E4304 has a single walled cover that is not particularly robust. The 3844-Z enclosure is durable and reinforced with dual walled construction.

The E4304 print mechanism is opened by pressing a green plastic lever which could easily break off.

Zebra TLP 3844-Z vs. Cognitive Del Sol 423002

Price & Warranty	Zebra	Cognitive	Cognitive Del Sol
Model #	TLP 3844-Z	Del Sol (DT423002)	
List Price:	\$895	\$895	This is the successor to the Blaster and Solus. The Del Sol has plastic latches which feel flimsy and could snap off under stress.
Printer Warranty:	1 Year	1 Year	The 3844-Z has sturdy dual-wall construction and strong molded hinges and parts.
Print Head Warranty:	6 Months	2,000,000 Inches (50Km)	
Print Features			
Printer Type:	Direct and Thermal Transfer	Direct & Thermal Transfer	
Print Speed:	4 IPS (102mm/sec.)	3 IPS (76mm/sec.)	
Printhead Resolution:	300 DPI (12 dots/mm)	Selectable 101, 203 & 300 DPI	
Flash:	4MB	512KB	
SRAM:	8MB SDRAM	512KB	
Physical Features			
Footprint (D x W x H):	9.75" x 7.9" x 6.8" (248mm x 201mm x 173mm)	10" x 7" x 7" (254mm x 178mm x 178mm)	
Weight:	3.2 lbs. (1.4 kg.)	3.5 lbs. (1.59 kg.)	
Imaging Features			
Rotated (0°, 90°, 180°, 270°):	Y	Y	
# of Resident Fonts:	10	7	
Expandable Vertically & Horizontally:	10x	10x	
Smooth Fonts:	Y	Y	
Media Features			
Maximum Media Width:	4.25" (108 mm)	4.25" (108mm)	
Minimum Media Width:	1.0" (25.4 mm)	1.0" (25mm)	
Maximum Media Length:	39" (991 mm)	20" (513mm)	
Minimum Media Length:	0.38" (9.7mm)	0.0025" (0.0635mm)	
Thickness:	0.003" - 0.007" (0.08 mm - 0.18 mm)	0.007" - 0.010" (0.18mm - 0.25mm)	
Maximum OD (Outside Diameter):	5.0" (127 mm)	5.0" (127mm)	
Minimum ID (Inner Diameter):	1.0" (25.4 mm)	1.0" (25mm)	
Ribbon Length:	2,928" (74M)	5,500" (140M)	
Connectivity			
Centronics Parallel:	Y	Y	
RS-232 C:	1,200 - 38,400 bps	600 - 115,200 bps	
USB:	Y	N	
Options & Accessories			
Expandable Memory:	OPT. 8MB Flash = \$349	2MB or 4MB	
Black Line sensor:	STD.	STD	
Label Taken Sensor:	OPT. = \$35	OPT. = \$100	
Cutter:	OPT. = \$300	OPT. = \$250	
Rewinder:	OPT. = \$395	?	
Real Time Clock:	OPT.w/exp. Mem. = \$349	OPT. = \$100	
Keyboard Display Unit:	N/A	OPT. = \$275	
Network Connectivity(Internal):	OPT. = \$249	OPT. = \$300	
Network Connectivity(External):	OPT. = \$299	OPT.	
Asian Font Sets:	OPT.	OPT	

Zebra TLP 3844-Z vs. Cognitive Blaster Advantage BT 423002

Price & Warranty	Zebra	Cognitive	
Model #:	TLP 3844-Z	Blaster Advantage(BT423002)	Cognitive Blaster Advantage
List Price:	\$895	\$1095	The Blaster has plastic latches which feel flimsy and could snap off under stress.
Printer Warranty:	1 Year	2 Year	The 3844-Z has sturdy dual-wall construction and strong molded hinges and parts.
Print Head Warranty:	6 Months	2,000,000 Inches (50Km)	
Print Features			
Printer Type:	Direct and Thermal Transfer	Direct & Thermal Transfer	
Print Speed:	4 IPS (102mm/sec.)	3 IPS (76mm/sec.)	
Printhead Resolution:	300 DPI (12 dots/mm)	300 DPI (12 dots/mm)	
Flash:	4MB	512KB	
SRAM:	8MB SDRAM	512KB	
Physical Features			
Footprint (D x W x H):	9.75" x 7.9" x 6.8" (248mm x 201mm x 173mm)	9.4" x 6.8" x 6.1" (238mm x 173mm x 155mm)	
Weight:	3.2 lbs. (1.4 kg.)	4.4 lbs. (2.0 kg.)	
Imaging Features			
Rotated (0°, 90°, 180°, 270°):	Y	Y	
# of Resident Fonts:	10	7	
Expandable Vertically & Horizontally:	10x	10x	
Smooth Fonts:	Y	Y	
Media Features			
Maximum Media Width:	4.25" (108 mm)	4.3" (109mm)	
Minimum Media Width:	1.0" (25.4 mm)	2.0" (50mm)	
Maximum Media Length:	39" (991 mm)	20" (513mm)	
Minimum Media Length:	0.38" (9.7mm)	0.25" (6.35mm)	
Thickness:	0.003" - 0.007" (0.08 mm - 0.18 mm)	0.0025" - 0.010" (0.0635mm - 0.25mm)	A more restricted media pathway means that loading the Blaster is more difficult than the 3844-Z, which has Zebra's OpenACCESS design for ease of use.
Maximum OD (Outside Diameter):	5.0" (127 mm)	4.7" (119mm)	
Minimum ID (Inner Diameter):	1.0" (25.4 mm)	1.0" (25mm)	
Ribbon Length:	2,928" (74M)	3,150" (80M)	
Connectivity			
Centronics Parallel:	Y	Y	
RS-232 C:	1,200 - 38,400 bps	600 bps - 115,200 bps	
USB:	Y	NO	
Options & Accessories			
Expandable Memory:	OPT. 8MB Flash = \$349	2MB or 4MB	The 3844-Z has more memory than the Blaster, for increased storage of fonts, forms and graphics
Black Line sensor:	STD.	STD.	
Label Taken Sensor:	OPT. = \$35	OPT. = \$100	
Cutter:	OPT. = \$300	OPT. = \$	
Rewinder:	OPT. = \$395	?	
Real Time Clock:	OPT.w/exp. Mem. = \$349	OPT. = \$100	
Keyboard Display Unit:	N/A	OPT. = \$275	
Network Connectivity(Internal):	OPT. = \$249	OPT. = \$300	
Network Connectivity(External):	OPT. = \$299		
Asian Character Sets:	OPT.	OPT	

Zebra TLP 3844-Z vs. TEC B-452

Price & Warranty	Zebra	TEC
Model #	TLP 3844-Z	B-452
List Price:	\$895	\$995 (parallel only)
Printer Warranty:	1 Year	1 year
Print Head Warranty:	6 Months	1 million inches
Print Features		
Printer Type:	Direct and Thermal Transfer	Direct and Thermal Transfer
Print Speed:	4 IPS (102mm/sec.)	4 IPS (102mm/sec.)
Printhead Resolution:	300 DPI (12 dots/mm)	300 DPI (12 dots/mm)
Flash:	4MB	2MB (US ver.)
SRAM:	8MB SDRAM	2MB DRAM
Physical Features		
Footprint (D x W x H):	9.75" x 7.9" x 6.8" (248mm x 201mm x 173mm)	7.9" x 10.6" x 9.6" (200mm x 270mm x 245mm)
Weight:	3.2 lbs. (1.4 kg.)	10.4lbs (4.7kg)
Imaging Features		
Rotated (0°, 90°, 180°, 270°):	Y	Y
# of Resident Fonts:	10	27
Expandable Vertically & Horizontally:	10x	9x
Smooth Fonts:	Y	Y
Media Features		
Maximum Media Width:	4.25" (108 mm)	4.5" (114mm)
Minimum Media Width:	1.0" (25.4 mm)	1.0 (25.4mm)
Maximum Media Length:	39" (991 mm)	39.25" (997mm)
Minimum Media Length:	0.38" (9.7mm)	0.5" (13mm)
Thickness:	0.003" - 0.007" (0.08 mm - 0.18 mm)	0.003" to 0.007" (0.1mm to 0.17mm)
Maximum OD (Outside Diameter):	5.0" (127 mm)	6" (152mm)
Minimum ID (Inner Diameter):	1.0" (25.4 mm)	1.5" (38mm)
Ribbon Length:	2,928" (74M)	11,800" (300M)
Connectivity		
Centronics Parallel:	Y	OPT (US version)
RS-232 C:	1,200 - 38,400 bps	2 Ports (Std on US Ver)
USB:	Y	N
Options & Accessories		
Expandable Memory:	OPT. 8MB Flash = \$349	1MB Flash
Black Line sensor:	STD.	STD
Label Taken Sensor:	OPT. = \$35	OPT
Cutter:	OPT. = \$300	OPT.
Rewinder:	OPT. = \$395	N/A
Real Time Clock:	OPT.w/exp. Mem. = \$349	N/A
Keyboard Display Unit:	N/A	OPT
Network Connectivity(Internal):	OPT. = \$249	OPT - ?
Network Connectivity(External):	OPT. = \$299	?
Asian Character Sets:	OPT.	OPT

TEC B-452

External roll holder takes up a large amount of counter space and only contains a 6" max OD & is not as useful as internal roll capability.

Footprint is large, especially due to the external roll holder. Without this roll holder, media cannot be loaded into printer mechanism.

The external roll holder parts are easily dropped and are cumbersome. If the roll holder mounts are lost, the media cannot be held in place.

Serial and parallel interfaces only. No USB or Ethernet available. Not as flexible or easy to integrate as the 3844-Z.

Media loading requires opening the printer lid as well as the print mechanism. This is not as simplified as the 3844-Z's OpenACCESS architecture.

Overhead space needed to open lid is rather high (almost 19.5 inches) and not good in areas with top space constraints.

Dip switches for printer configuration cannot be altered remotely without user or technician intervention.

The 3844-Z can be remotely reconfigured through software.

Price: At \$995 list for Parallel only, the TEC printer costs more for less capability than the 3844-Z.

The 3844-Z throughput is 3% faster on a batch of 50 labels through the parallel port than the TEC B-452. 3844-Z time to first label through the parallel port is 39% faster than the TEC.

Maintenance on the TEC B-452 is not as easy to accomplish as the 3844-Z. The cover removal is not intuitive and offers no clear way to remove the case assembly to access the electronics.

Zebra TLP 3844-Z vs. Sato CT 410

Price & Warranty	Zebra	Sato
Model #:	TLP 3844-Z	CT 410
List Price:	\$895	\$1,450
Printer Warranty:	1 Year	1 Year
Print Head Warranty:	6 Months	1 million inches
Print Features		
Printer Type:	Direct and Thermal Transfer	Direct and Thermal Transfer
Print Speed:	4 IPS (102mm/sec.)	4 IPS (100mm/sec.)
Printhead Resolution:	300 DPI (12 dots/mm)	300 DPI (12 dots/mm)
Flash:	4MB	8MB OPTIONAL
SRAM:	8MB SDRAM	10 MB Std
Physical Features		
Footprint (D x W x H):	9.75" x 7.9" x 6.8" (248mm x 201mm x 173mm)	9.1" x 7.8" x 7.1" (230mm x 198mm x 181mm)
Weight:	3.2 lbs. (1.4 kg.)	6.6lbs (3kg)
Imaging Features		
Rotated (0°, 90°, 180°, 270°):	Y	Y
# of Resident Fonts:	10	12
Expandable Vertically & Horizontally:	10x	12x
Smooth Fonts:	Y	Y
Media Features		
Maximum Media Width:	4.25" (108 mm)	4.6" (118 mm)
Minimum Media Width:	1.0" (25.4 mm)	1" (25.4 mm)
Maximum Media Length:	39" (991 mm)	15.7" (400mm)
Minimum Media Length:	0.38" (9.7mm)	0.6" (15mm)
Thickness:	0.003" - 0.007" (0.08 mm - 0.18 mm)	0.0025"- 0.010" (0.0635mm - 0.254mm)
Maximum OD (Outside Diameter):	5.0" (127 mm)	4.4" (110 mm)
Minimum ID (Inner Diameter):	1.0" (25.4 mm)	1.5" (38mm)
Ribbon Length:	2,928" (74M)	3,900" (100M)
Connectivity		
Centronics Parallel:	Y	IEEE 1284 (Std)
RS-232 C:	1,200 - 38,400 bps	OPTIONAL
USB:	Y	OPTIONAL
Options & Accessories		
Expandable Memory:	OPT. 8MB Flash = \$349	8MB Flash
Black Line sensor:	STD.	STD
Dispenser/Label Taken Sensor:	OPT. = \$35	OPT
Cutter:	OPT. = \$300	OPT
Rewinder:	OPT. = \$395	N/A
Real Time Clock:	OPT.w/exp. Mem. = \$349	N/A
Keyboard Display Unit:	N/A	N/A
Network Connectivity(Internal):	OPT. = \$249	OPT
Network Connectivity(External):	OPT. = \$299	-
Asian Character Sets:	OPT.	OPT

Sato CT 410

The Sato cover must be opened as well as the internal mechanism for media loading. This is not as easy or intuitive as the 3844-Z's OpenACCESS design.

The Sato printer utilizes dip switches and potentiometers for adjustments and setup of configurations. This is not easy to accomplish and cannot be done remotely. The 3844-Z can be configured remotely.

The Sato media sensor is left justified. This allows media to miss the sensor if guides or roll holders are not set correctly to media widths. The 3844-Z has center-justified guides for accurate alignment.

Lack of large media window does not give user sufficient visibility to low media conditions.

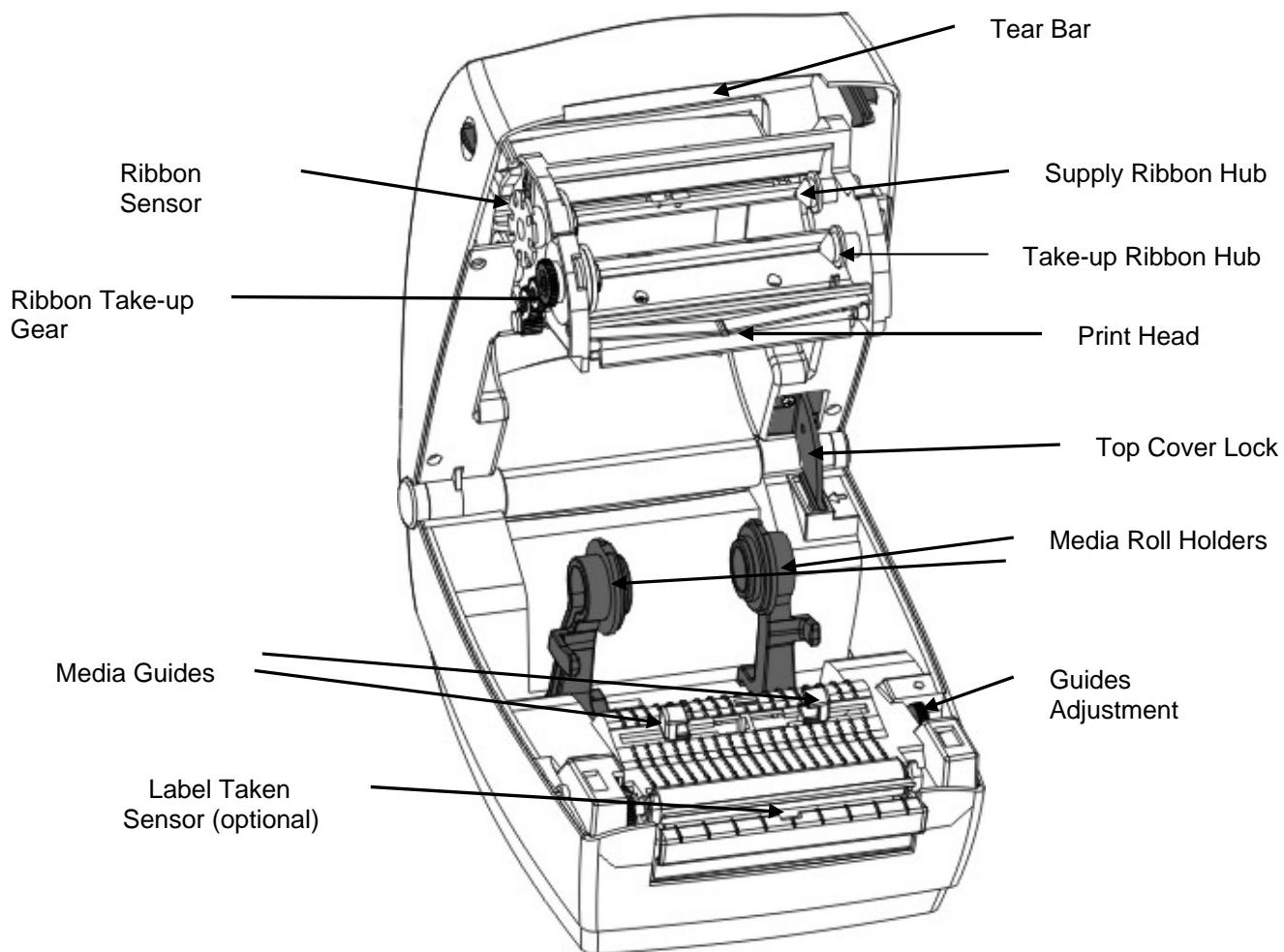
Unit comes standard with parallel only. USB, Ethernet and serial are all optional and add cost. The 3844-Z is much easier to integrate and more flexible due to standard serial, parallel and USB and optional internal Ethernet.

Price: At \$1450 list, the user gets much less for the money than the 3844-Z offers at \$895 list.

Roll diameter is a maximum of 4.4". The 3844-Z has a 5" OD media roll which provides more media & fewer roll changes.

Throughput is touted as one of the key attributes of the CT-410. However, the 3844-Z time to first label via the parallel port is 50% faster than the CT-410 and time to print a 50 label batch through the parallel port is 26% faster for the 3844-Z.

3844-Z Printer Tour



Preventative Maintenance and Warranty Information

Cleaning:

The Zebra 3844-Z exterior is cleaned with a lint-free cloth, and if necessary, a mild detergent solution or desktop cleaner can be used. Interior components (print head, platen, media path, label dispenser bar) are cleaned with alcohol or blown air.

Lubrication

All mechanical parts of the 3844-Z printer are self-lubricating and do not require additional lubrication.

Warranty Information

All Zebra products are sold with warranties. Refer to the User's Guide for warranty information specific to each product. Here is some general information:

Printer Products

Printers. All printers (excluding printheads) are warranted against defect in material or workmanship for twelve (12) months from the purchase date.

Proof of purchase or shipment date is required to validate the warranty period. The warranty becomes void if the equipment is modified, improperly installed or used, damaged by accident or neglect, or if any parts are improperly installed or replaced by the user.

NOTE: Products returned must be packaged in the original or comparable packing and shipping container. In the event equipment is not so packaged, or if shipping damage is evident, it will not be accepted for service under warranty. Surface transportation charges for return to customers in the continental United States is paid by Zebra. Otherwise, Zebra pays CPT (carriage paid to) nearest airport; customer pays customs, duties, taxes, and freight from airport to destination. If Zebra determines that the product returned for warranty service or replacement is not defective as herein defined, the customer will pay all handling and transportation costs.

Printheads. Since printhead wear is part of normal operation, the original printhead is covered by a limited **6 month** warranty. Warranty period begins on purchase date.

To qualify for this warranty, the printhead must be returned to the factory or to an authorized service center. Customers are not required to purchase Zebra supplies (media and/or ribbons) for warranty qualification. However, if it is determined that the use of other manufacturer supplies has caused any defect in the printhead for which a warranty claim is made, the user is responsible for Zebra's labor and material charges required to repair the defect. The warranty becomes void if the printhead is physically worn or damaged; also if it is determined that failure to follow the preventive maintenance schedule listed in the User's Guide has caused defect in the thermal printhead for which a warranty claim is made.

Software. Software is warranted to be free of defects in material and workmanship for 30 days from the date of purchase. In the event of notification within the warranty period of defects, Zebra will replace the defective diskette or documentation.

Parts. All parts, maintenance kits, options kits, and accessories are warranted to be free of defects in material and workmanship for 90 days (except where otherwise denoted) from date of purchase. This warranty becomes void if the item is modified, improperly installed or used, or damaged by accident or neglect.

Zebra Supplies for the 3844-Z

For maximum performance and reliability of the TLP 3844-Z, use of Genuine Zebra supplies is strongly recommended. No other supplies brand is specifically engineered for Zebra printers to provide optimum print quality and the best performance. Zebra offers a variety of labels, tags, and paper to meet specific demands of any application. In case the standard media offering does not meet the requirements of your application, Zebra can create and supply custom media in required sizes.

The standard Zebra supplies offering consists of standard, outside wound, direct thermal media. Alternative sizes and special media can be custom ordered.

Prices are subject to change without notice.

Direct Quick Print 3000

The inner diameter of these rolls is 1.0" and the outer diameter is 5.0".

Size Width Length		Part #	Labels/ Roll	Rolls/ Carton	Weight/ Carton	Rolls					
						1-7 Price/Roll	8-23 Price/Roll	24-95 Price/Roll	96-239 Price/Roll	240+ Price/Roll	
						Price/M	Price/M	Price/M	Price/M	Price/M	
2.25"	x	0.75"	800262-075*	3,315	12	18 lbs.	\$14.23 \$4.29/M	\$12.09 \$3.65/M	\$10.88 \$3.28/M	\$9.79 \$2.95/M	\$9.30 \$2.80/M
2.25"	x	1.25"	800262-125*	2,100	12	18 lbs.	\$14.23 \$6.77/M	\$12.09 \$5.76/M	\$10.88 \$5.18/M	\$9.79 \$4.66/M	\$9.30 \$4.43/M
2.25"	x	2.00"	800262-205*	1,370	12	18 lbs.	\$14.23 \$10.38/M	\$12.09 \$8.82/M	\$10.88 \$7.94/M	\$9.79 \$7.15/M	\$9.30 \$6.79/M
2.25"	x	4.00"	800262-405*	700	12	18 lbs.	\$14.23 \$20.32/M	\$12.09 \$17.27/M	\$10.88 \$15.54/M	\$9.79 \$13.99/M	\$9.30 \$13.28/M
4.00"	x	1.25"	800264-125*	2,100	12	20 lbs.	\$24.09 \$11.47/M	\$20.47 \$9.75/M	\$18.43 \$8.77/M	\$16.58 \$7.90/M	\$15.75 \$7.50/M
4.00"	x	3.00"	800264-305*	930	12	20 lbs.	\$20.95 \$22.53/M	\$17.80 \$19.14/M	\$16.02 \$17.23/M	\$14.42 \$15.51/M	\$13.69 \$14.72/M
4.00"	x	3.00"	800266-243* Two Up	1,860	6	20 lbs.	\$57.79 \$31.07/M	\$49.10 \$26.40/M	\$44.19 \$23.76/M	\$39.77 \$21.38/M	\$37.77 \$20.31/M
4.00"	x	4.00"	800264-405*	700	12	20 lbs.	\$24.09 \$34.42/M	\$20.47 \$29.25/M	\$18.43 \$26.32/M	\$16.58 \$23.69/M	\$15.75 \$22.50/M
4.00"	x	5.00"	800264-505*	565	12	20 lbs.	\$24.09 \$42.65/M	\$20.47 \$36.23/M	\$18.43 \$32.61/M	\$16.58 \$29.35/M	\$15.75 \$27.87/M
4.00"	x	6.00"	800264-605*	475	12	20 lbs.	\$20.95 \$44.11/M	\$17.80 \$37.48/M	\$16.02 \$33.73/M	\$14.42 \$30.36/M	\$13.69 \$28.83/M

* Perf'd Liner

Direct Quick Print 3000

The inner diameter of these rolls is 1.0" and the outer diameter is 4.0".

Size		Part #	Labels/ Roll	Rolls/ Carton	Weight/ Carton	Rolls				
						1-7		8-23		24-95
						Price/Roll	Price/M	Price/Roll	Price/M	240+
Width	Length					Price/M	Price/M	Price/M	Price/M	Price/M
1.00"	3.00"	800510-300	500	12	16 lbs.	\$4.36 \$8.71/M	\$3.70 \$7.40/M	\$3.33 \$6.66/M	\$3.00 \$6.00/M	\$2.85 \$5.69/M
1.20"	0.85"	800999-007*	1,500	12	16 lbs.	\$4.67 \$3.12/M	\$3.97 \$2.65/M	\$3.57 \$2.38/M	\$3.22 \$2.14/M	\$3.06 \$2.04/M
1.25"	1.00"	800512-105*	1,380	12	16 lbs.	\$4.66 \$3.38/M	\$3.96 \$2.87/M	\$3.56 \$2.58/M	\$3.21 \$2.32/M	\$3.04 \$2.21/M
2.25"	0.75"	800522-075*	1,780	12	17 lbs.	\$7.01 \$3.94/M	\$5.95 \$3.35/M	\$5.36 \$3.01/M	\$4.82 \$2.71/M	\$4.58 \$2.57/M
2.25"	1.25"	800522-125*	1,135	12	17 lbs.	\$7.01 \$6.17/M	\$5.95 \$5.25/M	\$5.36 \$4.72/M	\$4.82 \$4.25/M	\$4.58 \$4.04/M
2.25"	2.00"	800522-205*	735	12	17 lbs.	\$7.01 \$9.54/M	\$5.95 \$8.10/M	\$5.36 \$7.29/M	\$4.82 \$6.56/M	\$4.58 \$6.23/M
2.25"	3.00"	800522-305*	500	12	17 lbs.	\$7.57 \$15.14/M	\$6.43 \$12.86/M	\$5.79 \$11.58/M	\$5.21 \$10.42/M	\$4.95 \$9.89/M
2.25"	4.00"	800522-405*	380	12	17 lbs.	\$7.01 \$18.44/M	\$5.95 \$15.67/M	\$5.36 \$14.10/M	\$4.82 \$12.69/M	\$4.58 \$12.05/M
3.00"	1.00	800530-105*	1,380	12	18 lbs.	\$10.66 \$7.72/M	\$9.05 \$6.56/M	\$8.15 \$5.91/M	\$7.33 \$5.31/M	\$6.97 \$5.05/M
3.00"	2.00"	800530-205	735	12	18 lbs.	\$10.66 \$14.50/M	\$9.05 \$12.32/M	\$8.15 \$11.09/M	\$7.33 \$9.98/M	\$6.97 \$9.48/M
4.00"	1.00"	800540-105*	1,310	12	19 lbs.	\$12.14 \$9.26/M	\$10.31 \$7.87/M	\$9.28 \$7.08/M	\$8.35 \$6.38/M	\$7.93 \$6.06/M
4.00"	1.50"	800540-155*	960	12	19 lbs.	\$11.53 \$12.01/M	\$9.79 \$10.20/M	\$8.81 \$9.18/M	\$7.93 \$8.26/M	\$7.53 \$7.85/M
4.00"	2.00"	800540-205	735	12	19 lbs.	\$13.25 \$18.03/M	\$11.26 \$15.32/M	\$10.14 \$13.79/M	\$9.12 \$12.41/M	\$8.66 \$11.79/M
4.00"	2.50"	800540-250*	640	12	19 lbs.	\$12.45 \$19.45/M	\$10.58 \$16.52/M	\$9.52 \$14.87/M	\$8.57 \$13.39/M	\$8.14 \$12.71/M
4.00"	3.00"	800540-305*	500	12	19 lbs.	\$11.53 \$23.05/M	\$9.79 \$19.59/M	\$8.81 \$17.63/M	\$7.93 \$15.86/M	\$7.53 \$15.07/M
4.00"	4.00"	800540-405*	377	12	19 lbs.	\$11.53 \$30.57/M	\$9.79 \$25.97/M	\$8.81 \$23.38/M	\$7.93 \$21.04/M	\$7.53 \$19.98/M
4.00"	5.00"	800540-500	305	12	19 lbs.	\$12.45 \$40.81/M	\$10.58 \$34.68/M	\$9.52 \$31.21/M	\$8.57 \$28.09/M	\$8.14 \$26.67/M
4.00"	5.00"	800540-505*	305	12	19 lbs.	\$12.45 \$40.81/M	\$10.58 \$34.68/M	\$9.52 \$31.21/M	\$8.57 \$28.09/M	\$8.14 \$26.67/M
4.00"	6.00"	800540-600	250	12	19 lbs.	\$11.53 \$46.10/M	\$9.79 \$39.17/M	\$8.81 \$35.25/M	\$7.93 \$31.73/M	\$7.53 \$30.13/M
4.00"	6.00"	800540-605*	250	12	19 lbs.	\$11.53 \$46.10/M	\$9.79 \$39.17/M	\$8.81 \$35.25/M	\$7.93 \$31.73/M	\$7.53 \$30.13/M

* Perf'd Liner

Direct I.R. 4000

The inner diameter of these rolls is 1.0" and the outer diameter is 4.0".

Size	Labels/ Part #	Roll	Rolls						
			1-7 Price/Roll	8-23 Price/Roll	24-95 Price/Roll	96-239 Price/Roll	240+ Price/Roll		
			Price/M	Price/M	Price/M	Price/M	Price/M		
4.00" x 5.00'	800540-501	305	12	19 lbs.	\$20.53 \$67.32/M	\$17.45 \$57.20/M	\$15.70 \$51.48/M	\$14.13 \$46.33/M	\$13.42 \$44.00/M
4.00" x 6.00"	800540-601	250	12	19 lbs.	\$20.53 \$82.13/M	\$17.45 \$69.78/M	\$15.70 \$62.81/M	\$14.13 \$56.53/M	\$13.42 \$53.68/M

Direct Tag 2070

The inner diameter of these rolls is 1.0" and the outer diameter is 4.0".

Size	Labels/ Part #	Roll	Rolls						
			1-7 Price/Roll	8-23 Price/Roll	24-95 Price/Roll	96-239 Price/Roll	240+ Price/Roll		
			Price/M	Price/M	Price/M	Price/M	Price/M		
1.25" x 2.25"	800999-005*	600	12	16 lbs.	\$7.27 \$12.11/M	\$6.18 \$10.29/M	\$5.56 \$9.26/M	\$5.00 \$8.34/M	\$4.75 \$7.92/M
2.25" x 1.37"	800999-009*	967	12	17 lbs.	\$8.71 \$9.00/M	\$7.40 \$7.65/M	\$6.66 \$6.88/M	\$5.99 \$6.20/M	\$5.69 \$5.88/M

* Perf'd Liner with string hole

The part numbers listed below are for use with the TigerWriter 2, TigerWriter 4, LP2022/2122, LP2042/2142, LP/TLP2242, LP/TLP2824, LP2443 Orion, LP/TLP 2722/2622, LP/TLP 2742/2642, LP/TLP2844, TLP 3742/3642 printers

Direct Quick Print 3000 (2 Across) Price Labels The inner diameter of these rolls is 1.0" and the outer diameter is 4.0".

Size	Labels/ Part #	Roll	Rolls						
			1-7 Price/Roll	8-23 Price/Roll	24-95 Price/Roll	96-239 Price/Roll	240+ Price/Roll		
			Price/M	Price/M	Price/M	Price/M	Price/M		
1.18" x 1.00"	800999-011*	2,620	12	17 lbs.	\$8.17 \$3.12/M	\$6.95 \$2.65/M	\$6.25 \$2.39/M	\$5.63 \$2.15/M	\$5.34 \$2.04/M
1.125" x 1.25"	800127-101*	1,135	12	17 lbs.	\$7.27 \$6.41/M	\$6.18 \$5.44/M	\$5.56 \$4.90/M	\$5.00 \$4.41/M	\$4.75 \$3.82/M

* Perf'd Liner

Direct Remove 3000

The inner diameter of these rolls is 1.0" and the outer diameter is 4.0".

Size	Labels/ Part #	Roll	Rolls						
			1-7 Price/Roll	8-23 Price/Roll	24-95 Price/Roll	96-239 Price/Roll	240+ Price/Roll		
			Price/M	Price/M	Price/M	Price/M	Price/M		
1.18" x 1.00"	800999-031*	2,620	12	17 lbs.	\$11.10 \$4.24/M	\$9.43 \$3.60/M	\$8.49 \$3.24/M	\$7.64 \$2.92/M	\$7.26 \$2.77/M
	2 UP								

* Perf'd Liner

Z-Direct Kimdura Jewelry (Butterfly) Label with UV Shield

The inner diameter of these rolls is 1.0" and the outer diameter is 4.0".

Size	Width	Length	Part #	Rolls									
				Labels/		Rolls/		Weight/	1-7	8-23	24-95	96-239	240+
				Roll	Carton	Carton	Carton	Carton	Price/Roll	Price/Roll	Price/Roll	Price/Roll	Price/Roll
									Price/M	Price/M	Price/M	Price/M	Price/M
2.20" x 0.50"		w/o flaps	800999-006	2,490	12	17 lbs.			\$22.06	\$18.75	\$16.87	\$15.18	\$14.42
									\$8.86/M	\$7.53/M	\$6.78/M	\$6.10/M	\$5.79/M
2.20" x 0.50"		with flaps	800999-030	2,490	12	17 lbs.			\$22.06	\$18.75	\$16.87	\$15.18	\$14.42
									\$8.86/M	\$7.53/M	\$6.78/M	\$6.10/M	\$5.79/M

Direct Receipt 2024

The inner diameter of these rolls is 1.0" and the outer diameter is 4.0".

Size	Width	Length	Part #	Rolls									
				Labels/		Rolls/		Weight/	1-7	8-23	24-95	96-239	240+
				Roll	Carton	Carton	Carton	Carton	Price/Roll	Price/Roll	Price/Roll	Price/Roll	Price/Roll
									Price/M	Price/M	Price/M	Price/M	Price/M
2.00" x Cont.		800420-314	328'	328'	12	17 lbs.			\$7.86	\$6.68	\$6.01	\$5.41	\$5.14
									N/A	N/A	N/A	N/A	N/A
4.00" x Cont.		800440-314	328'	328'	12	19 lbs.			\$10.26	\$8.72	\$7.84	\$7.06	\$6.70
									N/A	N/A	N/A	N/A	N/A

Direct Near I.R. 3000 UPS/FEDEX Shipping Label

The inner diameter of these rolls is 1.0" and the outer diameter is 4.0".

Size	Width	Length	Part #	Rolls									
				Labels/		Rolls/		Weight/	1-7	8-23	24-95	96-239	240+
				Roll	Carton	Carton	Carton	Carton	Price/Roll	Price/Roll	Price/Roll	Price/Roll	Price/Roll
									Price/M	Price/M	Price/M	Price/M	Price/M
4.00" x 2.25"		95638* ¹	680	680	12	19 lbs.			\$20.35	\$17.29	\$15.56	\$14.00	\$13.30
									\$29.93/M	\$25.43/M	\$22.88/M	\$20.60/M	\$19.56/M
4.00" x 6.00"		95639* ¹	260	260	12	19 lbs.			\$20.35	\$17.29	\$15.56	\$14.00	\$13.30
									\$78.27/M	\$66.50/M	\$59.85/M	\$53.87/M	\$51.15/M
4.00" x 8.00"		95640* ¹	200	200	12	19 lbs.			\$20.35	\$17.29	\$15.56	\$14.00	\$13.30
									\$101.75/M	\$86.45/M	\$77.81/M	\$70.02/M	\$66.50/M

*¹ Perforation between labels
Z-Direct Linerless*

The inner diameter of these rolls is 1.0" and the outer diameter is 5.0".

Size	Width	Length	Part #	Rolls									
				Labels/		Rolls/		Weight/	1-7	8-23	24-95	96-239	240+
				Roll	Carton	Carton	Carton	Carton	Price/Roll	Price/Roll	Price/Roll	Price/Roll	Price/Roll
									Price/M	Price/M	Price/M	Price/M	Price/M
3.00" x 370'		800580-300	Cont.	6	9 lbs.				\$32.10	\$27.27	\$24.55	\$22.09	\$20.98
									N/A	N/A	N/A	N/A	N/A
4.00" x 370'		800580-400	Cont.	6	9 lbs.				\$42.62	\$36.21	\$32.59	\$29.33	\$27.85
									N/A	N/A	N/A	N/A	N/A

*Printer must be configured with the linerless platen kits are available.

Trans Matte 2000

The inner diameter of these rolls is 1.0" and the outer diameter is 4.0".

Size	Width	Length	Part #	Labels/ Roll	Rolls/ Carton	Weight/ Carton	Rolls					
							1-7		8-23		24-95	
							Price/Roll	Price/M	Price/Roll	Price/M	Price/Roll	Price/M
1.20"	x	0.85"	800212-085*	1,500	12	16 lbs.	\$3.45	\$2.93	\$2.64	\$2.38	\$2.26	
							\$2.30/M	\$1.96/M	\$1.76/M	\$1.58/M	\$1.50/M	
1.25"	x	1.00"	800212-105*	1,380	12	16 lbs.	\$3.69	\$3.13	\$2.82	\$2.54	\$2.41	
							\$2.67/M	\$2.27/M	\$2.04/M	\$1.84/M	\$1.75/M	
2.25"	x	0.75"	800222-075*	1,780	12	17 lbs.	\$6.03	\$5.13	\$4.61	\$4.15	\$3.94	
							\$3.39/M	\$2.88/M	\$2.59/M	\$2.33/M	\$2.21/M	
2.25"	x	1.25"	800222-125*	1,135	12	17 lbs.	\$5.66	\$4.81	\$4.33	\$3.90	\$3.70	
							\$4.99/M	\$4.24/M	\$3.82/M	\$3.44/M	\$3.26/M	
2.25"	x	2.00"	800222-205*	735	12	17 lbs.	\$6.03	\$5.13	\$4.61	\$4.15	\$3.94	
							\$8.21/M	\$6.97/M	\$6.28/M	\$5.65/M	\$5.36/M	
2.25"	x	3.00"	800222-305*	500	12	17 lbs.	\$6.03	\$5.13	\$4.61	\$4.15	\$3.94	
							\$12.06/M	\$10.25/M	\$9.23/M	\$8.30/M	\$7.89/M	
2.25"	x	4.00"	800222-405*	380	12	17 lbs.	\$6.03	\$5.13	\$4.61	\$4.15	\$3.94	
							\$15.87/M	\$13.49/M	\$12.14/M	\$10.92/M	\$10.38/M	
3.00"	x	1.00	800230-105*	1,380	12	18 lbs.	\$7.54	\$6.41	\$5.77	\$5.19	\$4.93	
							\$5.46/M	\$4.64/M	\$4.18/M	\$3.76/M	\$3.57/M	
3.00"	x	2.00"	800230-205*	735	12	18 lbs.	\$7.54	\$6.41	\$5.77	\$5.19	\$4.93	
							\$10.26/M	\$8.72/M	\$7.84/M	\$7.06/M	\$6.70/M	
4.00"	x	1.00"	800240-105*	1,490	12	19 lbs.	\$10.42	\$8.86	\$7.97	\$7.17	\$6.81	
							\$6.99/M	\$5.94/M	\$5.35/M	\$4.81/M	\$4.57/M	
4.00"	x	1.50"	800240-155*	960	12	19 lbs.	\$9.35	\$7.94	\$7.15	\$6.43	\$6.11	
							\$9.74/M	\$8.27/M	\$7.45/M	\$6.70/M	\$6.36/M	
4.00"	x	2.00"	800240-205*	735	12	19 lbs.	\$9.95	\$8.46	\$7.61	\$6.85	\$6.51	
							\$13.54/M	\$11.51/M	\$10.36/M	\$9.32/M	\$8.85/M	
4.00"	x	3.00"	800240-305*	500	12	19 lbs.	\$9.35	\$7.94	\$7.15	\$6.43	\$6.11	
							\$18.69/M	\$15.88/M	\$14.30/M	\$12.87/M	\$12.22/M	
4.00"	x	4.00"	800240-405*	377	12	19 lbs.	\$9.95	\$8.46	\$7.61	\$6.85	\$6.51	
							\$26.40/M	\$22.43/M	\$20.19/M	\$18.17/M	\$17.26/M	
4.00"	x	5.00"	800240-505*	305	12	19 lbs.	\$9.95	\$8.46	\$7.61	\$6.85	\$6.51	
							\$32.63/M	\$27.73/M	\$24.95/M	\$22.46/M	\$21.33/M	
4.00"	x	6.00"	800240-605*	250	12	19 lbs.	\$9.35	\$7.94	\$7.15	\$6.43	\$6.11	
							\$37.39/M	\$31.77/M	\$28.59/M	\$25.73/M	\$24.44/M	

* Perf'd Liner

Trans Matte 2000 (2 Across) Price Labels

The inner diameter of these rolls is 1.0" and the outer diameter is 4.0".

Size	Width	Length	Part #	Labels/ Roll	Rolls/ Carton	Weight/ Carton	Rolls					
							1-7		8-23		24-95	
							Price/Roll	Price/M	Price/Roll	Price/M	Price/Roll	Price/M
1.18"	x	1.00"	800999-080*	2,620	12	16 lbs.	\$9.90	\$8.41	\$7.57	\$6.82	\$6.47	
							\$3.78/M	\$3.21/M	\$2.89/M	\$2.60/M	\$2.47/M	

* Perf'd Liner

Trans Matte 2000

The inner diameter of these rolls is 1.0" and the outer diameter is 5.0".

Size		Part #	Labels/ Roll	Rolls/ Carton	Weight/ Carton	Rolls				
						1-7		8-23		24-95
						Price/Roll	Price/M	Price/M	Price/M	96-239
Width	Length	Part #	Roll	Carton	Carton	Price/M	Price/M	Price/M	Price/M	240+
2.25"	0.75"	800272-075*	3,315	12	18 lbs.	\$10.81 \$3.26/M	\$9.18 \$2.77/M	\$8.26 \$2.49/M	\$7.44 \$2.24/M	\$7.06 \$2.13/M
2.25"	1.25"	800272-125*	2,100	12	18 lbs.	\$10.81 \$5.15/M	\$9.18 \$4.37/M	\$8.26 \$3.94/M	\$7.44 \$3.54/M	\$7.06 \$3.36/M
4.00"	1.50"	800274-155*	1,790	12	20 lbs.	\$18.73 \$10.47/M	\$15.92 \$8.89/M	\$14.33 \$8.00/M	\$12.89 \$7.20/M	\$12.24 \$6.84/M
4.00"	3.00"	800274-305*	930	12	20 lbs.	\$18.73 \$20.14/M	\$15.92 \$17.11/M	\$14.33 \$15.40/M	\$12.89 \$13.86/M	\$12.24 \$13.17/M
4.00"	4.00"	800274-405*	700	12	20 lbs.	\$18.73 \$26.76/M	\$15.92 \$22.74/M	\$14.33 \$20.46/M	\$12.89 \$18.42/M	\$12.24 \$17.49/M
4.00"	5.00"	800274-505*	565	12	20 lbs.	\$18.73 \$33.16/M	\$15.92 \$28.17/M	\$14.33 \$25.35/M	\$12.89 \$22.82/M	\$12.24 \$21.67/M
4.00"	6.00"	800274-605*	475	12	20 lbs.	\$18.73 \$39.44/M	\$15.92 \$33.51/M	\$14.33 \$30.16/M	\$12.89 \$27.14/M	\$12.24 \$25.78/M

* Perf'd Liner

Ribbons for the TLP 3844-Z**5319 Wax Ribbons**

	Part #	Width		Carton		Suggested List Price/Roll			
		(inches)	(mm)	Quantity	Weight	1-47	48-119	120-239	240+
5319	800130-001	1.30"	33mm	12	5 lbs.	\$1.88	\$1.70	\$1.61	\$1.53
	800130-002	2.50"	64mm	12	5.5 lbs.	\$3.63	\$3.27	\$3.11	\$2.95
	800130-003	3.30"	84mm	12	6 lbs.	\$4.78	\$4.30	\$4.09	\$3.88
	800130-004	4.30"	110mm	12	6.5 lbs.	\$6.22	\$5.60	\$5.32	\$5.05

3200 Wax/Resin Ribbons

	Part #	Width		Carton		Suggested List Price/Roll			
		(inches)	(mm)	Quantity	Weight	1-47	48-119	120-239	240+
3200	800130-101	1.30"	33mm	12	5 lbs.	\$2.28	\$2.05	\$1.95	\$1.85
	800130-102	2.50"	64mm	12	5.5 lbs.	\$4.42	\$3.98	\$3.78	\$3.59
	800130-103	3.30"	84mm	12	6 lbs.	\$5.77	\$5.20	\$4.94	\$4.69
	800130-104	4.30"	110mm	12	6.5 lbs.	\$7.57	\$6.81	\$6.48	\$6.15

5095 Resin Ribbons

	Part #	Width		Carton		Suggested List Price/Roll			
		(inches)	(mm)	Quantity	Weight	1-47	48-119	120-239	240+
5095	800130-201	1.30"	33mm	12	5 lbs.	\$4.15	\$3.73	\$3.55	\$3.37
	800130-202	2.50"	64mm	12	5.5 lbs.	\$8.06	\$7.26	\$6.90	\$6.55
	800130-203	3.30"	84mm	12	6 lbs.	\$10.56	\$9.51	\$9.03	\$8.58
	800130-204	4.30"	110mm	12	6.5 lbs.	\$13.82	\$12.44	\$11.83	\$11.23

Note: All the above ribbons are 244 feet (74m) in length and have a 0.5" (12.5mm) inner diameter core

3844-Z Pricing (North America)

TLP 3844-Z - Standard Configurations			300 dpi/ZPLII			
Part Number	Print Width	Description	Serial parallel & USB	Head Up Sensor	Voltage	Suggested List Price
384Z-10300-0001	4" / 102mm	TLP 3844-Z Thermal Transfer Desktop Printer with 5" Roll Capacity	•	•	100-240	\$895.00
Accessories						
Part Number		Description				Suggested List Price
77843		Japanese Monotype Mincho™ Smooth Scalable Font (code page 932)*				\$50.00
77848		Japanese HGP Gothic B™ Smooth Scalable Font (code page 942)*				\$50.00
77844		Korean HY Gothic Hangul™ Smooth Scalable Font (code page 947)*				\$50.00
77847		Traditional Chinese Monotype Kai™ Smooth Scalable Font (code page 950)*				\$50.00
77846		Simplified Chinese Monotype Sung™ Smooth Scalable Font (GB2312-80)				\$50.00
77845		Thai Angsana™ Smooth Scalable Font (code page 847)*				\$50.00
77842		Over 20 Smooth Scalable Fonts (code page 850)*				\$50.00
77840		Five Asian Bitmap Flash Font Pack (pt. Sizes 6, 12, 18, & 24, code page 850)*				\$50.00
46692		External ZebraNet® PrintServer II				\$299.00
46530L		ZPL II Programming Guide (bound hard copy)				\$25.00
105950-051		Maintenance Manual CD				\$175.00
105950-053		ZPL Desktop Accessories CD				\$10.00

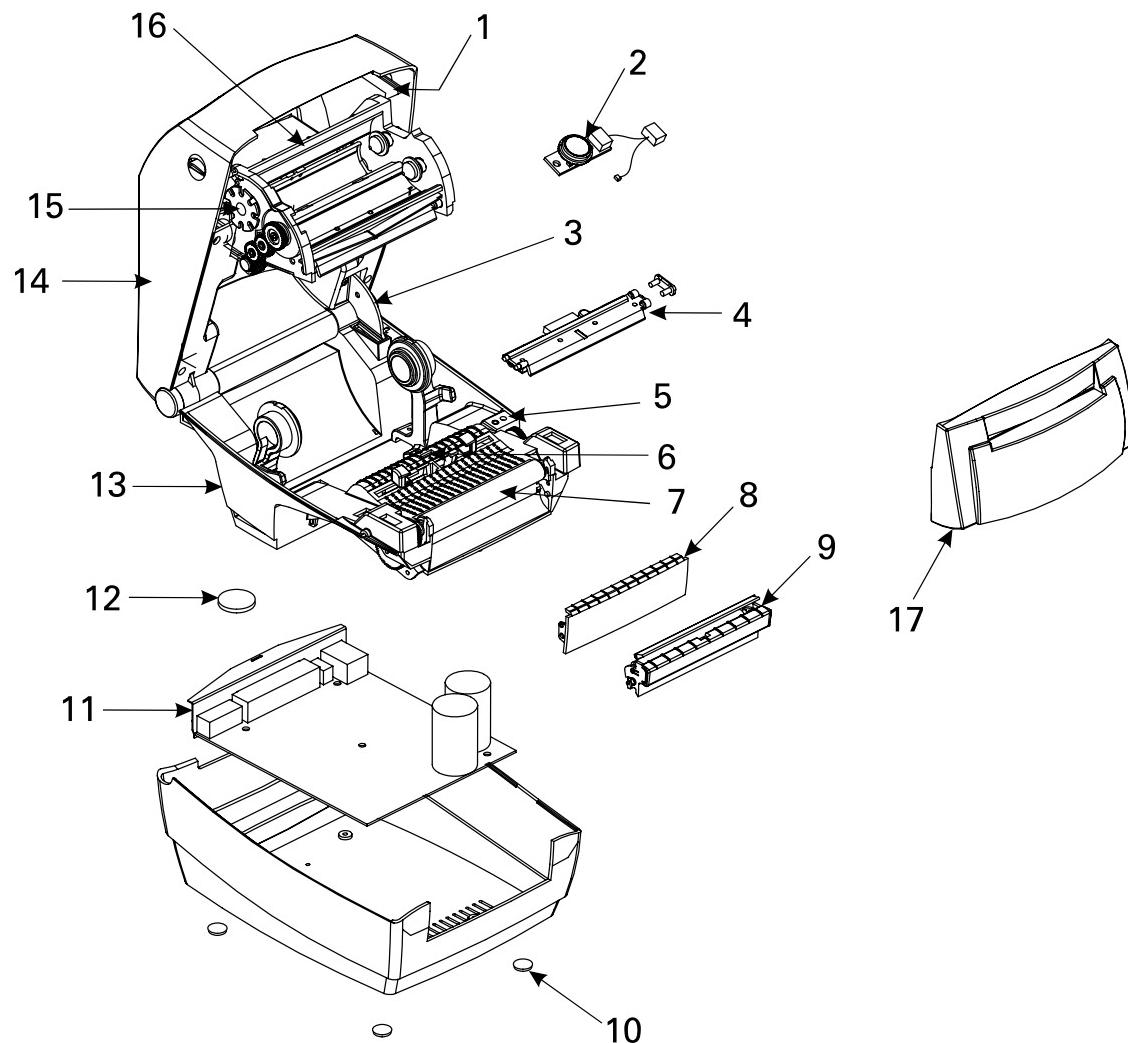
* Requires Full Flash (8MB) Memory Option (check on availability)

Custom Configurations

3844-Z Series - Custom Configurations		
(choose one item from each section to form a complete part number)		
Part Number	Description	Suggested List Price
384Z - 1	Base Printer 3844-Z with Thermal Transfer Print Technology and ZPL Command Language	\$895.00
- 0 3	Interface Parallel, RS232 Serial and USB	N/C
- 0 4	RS232 Serial, USB and Optional Internal ZebraNet PrintServer II	\$249.00
- 0	Power 100-240V A.C. USA and European	N/C
- 3	240V A.C. U.K.	N/C
- 4	240V A.C. Australian	N/C
- 0	Media Options No Options (standard)	N/C
- 1	Dispenser	\$35.00
- 2	Cutter	\$300.00
- 0 0	Printer Font Set USA and European	N/C
- 0	Memory 4MB Standard Flash, 8MB Standard SDRAM, No Real Time Clock	N/C
- 4	Full Flash (12 MB*), 8MB Standard SDRAM, Real Time Clock	\$349.00
- 1	User Documentation English	N/C
- 6	No Documentation	N/C
384Z - 1 0 3 0 1 - 0 0 4 1	Example: 3844-Z with Thermal Transfer Print Technology and ZPL Command Language Parallel, RS232 Serial & USB Interface, USA and European Power, Dispenser, USA and European Font Set, Full Flash, Standard SDRAM, Real Time Clock, English/European/Latin America Documentation	\$895+ \$35+ \$349 =\$1,279

*10.75 MB available to user

3844-Z Spare Parts



Item #	Description	Part Number	Support Qty. ¹
1	Latch Assy.	105910-052	4
2	Feed Switch/Sensor Assy. (set of 3)	105910-064	8
3	Upper Cover Support (set of 3)	105910-066	4
4	Print Head, 4" 300dpi Print Head Cable Assy.	105910-155 105910-065	4 4
5	Head Up Sensor	105910-072	4
6	Gap/Blackline Sensor PCBA (set of 3)	105910-054	4
7	Platen Kit, std. (set of 3)	105910-055	4
8	Front Bezel, std. (set of 10)	105910-057	4
9	Front Bezel, Dispenser TLP 2844-Z , TLP 3844-Z Label Taken Sensor (set of 3)	105916-003 105916-001	4 8
10	Rubber Foot Kit (set of 24)	105910-007	4
11	Main Control PCBA, Std. Memory, Ser./Par./USB Main Control PCBA, Std. Memory, Ser./Ethernet Ready/USB Main Control PCBA, Full Memory, Ser./Par./USB Main Control PCBA, Full Memory, Ser./Ethernet Ready/USB Kit, Ethernet IO PCBA with cables Kit, PrintServerII Daughter Board Kit, 4" Ethernet Back Panel	105916-009 105916-010 105916-011 105916-012 105910-121 105910-123 105910-124	4 4 4 4 4 4 4
12	Battery, 3V Lithium (set of 10)	105950-003	1
13	Bottom Frame Assy. w/o Platen	105910-160	4
14	Upper Cover Assy.	105910-060	4
15	Ribbon Out Sensor (set of 3)	105910-067	4
16	Ribbon Carriage w/o print head	105910-061	4
17	Cutter Replacement Kit	105910-028	1
Not Shown	Power Supply, 100V-240V (C7) with US, Euro, U.K. & Australia Cords	105950-043	4
	Power Cord, U.S. 120V, IEC320C7(set of 5)	105950-038	1
	Power Cord, Euro 220V, IEC320C7(set of 5)	105950-039	1
	Power Cord, U.K. 240V, IEC320C7(set of 5)	105950-040	1
	Power Cord, Australia 240V, IEC320C7(set of 5)	105950-041	1
	Motor, Assy. (set of 2)	105910-161	1
	Shipping Pack	105950-050	A/R
	CD-ROM, ZPL Desktop Printers Software & Documentation	105950-053	A/R
	CD-ROM, Service Documentation	105950-051	A/R

Notes: 1 - Recommended quantity to support 100 printers. 2 - A check indicates a change from the last price list.

Questions and Answers

1. What is the difference between a 3842 and a 3844-Z?

The 3842 has a main logic board to support EPL. It cannot support ZPL.
The 3844-Z has a main logic board and electronics architecture to support ZPL and ZebraLink. It cannot support EPL. The 3844-Z is fully ZPL compatible.

2. Do the 3842 and 3844-Z have the same serial port parameters?

No. While both are RS-232, the serial port pin outs are different. The 3842 uses a straight through serial cable and the 3844-Z uses a null-modem serial cable.

- 3844-Z serial cable part number = 25949M
- 3842 serial cable part number = 300017-006

3. Can I use a 3842 Windows Driver for the 3844-Z?

No, the 3844-Z will have its own Windows Driver to support Windows applications.

4. Will the Zebra Keyboard Display Unit (KDU) work with the 3844-Z?

No, currently the KDU is only compatible with EPL-based printers. However, a custom script with cable adaptor is under development which will enable the KDU to be used with the 3844-Z. Please check the Zebra web site for updates on availability of this product.

5. Can I upgrade a 3842 to a 3844-Z by simply installing firmware?

No. The two products have completely different main logic boards. Also, the 3844-Z will not plug directly into an existing 3842 (EPL) application (see Q&A #1).

6. Does the 3844-Z take full advantage of the features and benefits associated with ZebraLink (ZebraNet View and ZebraNet Alert)?

Yes. While the EPL-based 3842 has limited status reporting when using the ZebraLink utilities, the ZPL-based 3844-Z is *fully ZebraLink capable* and offers full support of the features and benefits of the ZebraNet view and ZebraNet alert utilities.

7. Does the 3844-Z support any of the newest bar code symbologies such as Datamatrix and RSS?

Yes. Two new symbologies are offered standard on the 3844-Z printer. **Datamatrix**, a 2-D symbology, and several variations of **RSS-14**, including RSS-14, RSS limited, RSS-14 truncated, RSS-14 stacked and RSS Composite. These new symbologies are ideally suited for new applications in postal, small part and electronics manufacturing, and healthcare.

8. What ships with a 3844-Z printer?

A CD ROM is shipped with every 3844-Z printer. The CD contains the following material:

- Users manual
- ZPL II programmers manual
- ZebraNet utilities operators manual
- Windows printer drivers
- 3844-Z spare parts list
- Printer utility software

The following items are also included in the printer ship kit:

- Cleaning pen
- Sample label roll
- Printer quick-start guide

9. What options and accessories are available on the 3844-Z?

For a complete list of available 3844-Z options and accessories, please consult the 3844-Z price List.

10. When will the 3844-Z be available?

The 3844-Z can be ordered in August, 2003 and will begin shipping early September, 2003.